5-2011

Having an Elective Cesarean Section: Doing What's Best

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To the Graduate Council:

I am submitting herewith a dissertation written by Cynthia R Acuff Michaluk entitled "Having an Elective Cesarean Section: Doing What's Best." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Nursing.

Joanne Hall, Major Professor

We have read this dissertation and recommend its acceptance:

Janet Witucki-Brown, Susan Speraw, June D. Gorski

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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HAVING AN ELECTIVE CESAREAN SECTION: DOING WHAT'S BEST

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee at Knoxville

Cynthia R. Acuff Michaluk
May 2010

DEDICATION

This dissertation is dedicated to my family, my husband Dennis Michaluk, my daughter Tiffany Hartman, and my son, Steven Michaluk. Although this journey was at times difficult, they were my biggest cheerleaders throughout my academic career. I could not have completed this dissertation without their support and love. I love you guys.

ACKNOWLEDGEMENTS

The faculty of the University of Tennessee at Knoxville College of Nursing have been incredibly supportive throughout these three years. I want to thank all my professors for their encouragement and support. I also want to thank my committee members, Joanne Hall, Jan Witucki-Brown, Susan Speraw, and June Gorski, who have provided invaluable guidance and support. I would also like to thank the Gamma Chi Chapter of Sigma Theta Tau for a research grant that partially funded my dissertation.

I also want to thank my fellow students for support, Kathy Jenkins, Renee Burk, Polly McArthur, and Mary Nypaver. Their assistance, suggestions and support has helped me during this journey.

ABSTRACT

The purpose of this study was to discover a theory of how women decide to deliver their infants by cesarean section instead of experiencing a trial of labor and expected vaginal delivery when it is appropriate. The specific goals were to answer the research questions: What is the decision-making process by which healthy, low risk women choose to deliver their babies by cesarean delivery in the absence of medical indications? What antecedents occur to influence a pregnant woman's decision to undergo a maternal request cesarean section?

Seven women from the Knox and Sevier counties in East Tennessee underwent in-depth interviews. To qualify for the study, the women had to be healthy and low-risk, had an elective cesarean section within the last two years, be 18 years or older, and be English speaking.

Symbolic interactionism and feminism were utilized to provide a theoretical framework for the study. The grounded theory methodology by Strauss and Corbin, (1990) was used to develop the core category, context, antecedents, intervening factors and consequences.

From the data, a substantive theory was identified, "Having an elective c-section: Doing what's best." Mothers voiced that they felt like having a c-section was best for them and their baby. The antecedents of the women's decision were being scared and perceiving a cesarean section as an easier way to give birth. Women made this choice after gathering information and seeking support from health care providers, friends and family within the context of progressing through the pregnancy. Intervening facilitating factors included

receiving support from others and the ability to schedule the c-section. Hindering factors were non-supportive people and inappropriate medical information. Once the decision was made and the cesarean section was performed, the women voiced happiness with their decision.

The findings of this study may assist office nurses, public health nurses, midwives and advanced practice nurses, childbirth educators and other women's health nurses to educate women that childbirth is a normal process and vaginal birth can be achieved in most women safely and educate women on the risks/benefits of both birthing options. Recommendations are given for further research.

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I. INTRODUCTION

The birth of an infant is an extraordinary event in the life of a woman. After experiencing her baby grow over the past nine months, the pregnant woman prepares for childbirth. There are two birth options for mothers, a vaginal delivery or a cesarean delivery.

A cesarean delivery (c-section) is defined as a surgical procedure in which an incision is made in the skin of the lower abdomen and then in the uterus to extract the infant. Cesarean sections have generated much controversy, from the Middle Ages, during the Renaissance, and into modern times. Evidence exists that c-sections were done as early as 3,000 BC on each inhabited continent except Australia (Blumfeld-Kosinski, 1990). Initially all c-sections were done postmortem in an attempt to save the infant, which was a rare occurrence. The purpose of the postmortem c-section was so that the deceased mother and infant could be buried separately and blessed by the Church (Blumfeld-Kosinski, 1990). Therefore, their souls would be saved. Reports exist of infant and maternal survival in the Medieval Ages and into the Renaissance (Katz & Cefalo, 1988). Infants who survived a c-section were called "the unborn" because they did not emerge directly from the womb. They were also called the "fortunate" or "casones" (Blumfeld-Kosinski).

There is controversy over the origin of the word cesarean. Some believe the procedure was named after Julius Caesar. However it appears he was not born from a c-section because his mother survived into old age. The term cesarean may come from a Roman legal code "caesara." On the other hand, cesarean could have been derived from the Latin word "cadere" which means "to cut." In 1598, Jacque Gillineau, a student of

the great surgeon Pare, coined the term "section" (Blumfeld-Kosinski, 1990). The phrase cesarean section is a tautology. Therefore, many authors recommend using the term cesarean delivery. (However, I will use the term c-section because it is common usage for health care providers and the lay public.)

Controversy continues over cesarean deliveries. Cohen and Estner (1983) predicted that childbirth would become a surgical event by 1983. They postulated a "cesarean knife as the ultimate symbol of technocratic interference in the process of childbirth" (Cohen & Estner, p. 7). Although vaginal deliveries exceed the number of c-sections, the rapid rise in the number of c-sections made this prediction chilling.

Cesarean delivery is done for medical reasons such as vaginal bleeding, small pelvis, large infant, fetal distress or malpresentation of the infant. The majority of c-sections are done for medical reasons. However, the new trend among pregnant women is to choose to have a c-section. These cesarean sections are called maternal request c-sections or elective c-sections.

Before further discussion, it is crucial to define cesarean section by maternal request. Researchers have not identified a clear definition to be used consistently in studies, making comparison of studies difficult. Viswanathan et al. (2006) defines this phenomenon as a "cesarean delivery for a singleton (single fetus) pregnancy, on maternal request, at term, and in the absence of any maternal or fetal indication for cesarean delivery" (p. 24). When studies are cited in this paper, maternal request c-section will only be used when it is consistent with the definition above.

Vaginal birth is defined as the fetus being expelled from the womb after traveling down the birth canal. Labor contractions expedite the expulsion of the fetus. Most vaginal

deliveries take 6-24 hours. This is considered an unassisted delivery. Sometimes the physician or midwife uses a device to help the mother deliver the head. These devices include forceps and vacuum extraction. They are attached to the fetus' head and the fetus is pulled out, assisted by the mother pushing. These are called assisted deliveries or operative deliveries and have some risk for morbidity for the infant and mother. Natural childbirth refers to an unassisted delivery where the mother receives no pharmacologic analgesia (such as an epidural anesthesia). The woman experiences labor and delivers the infant using adjunctive therapies, such as (a) walking, (b) leaning on a large ball, (c) leaning on their partner, (d) relaxation techniques, (e) visualization and (f) focusing intently on a particular object (Smith, 2004; Turley, 2004).

Significance of the Study

The problem is that cesarean sections done for maternal request are associated with increases in maternal and infant mortality and morbidity, and increased health care costs. C-sections by maternal request also play a role in the alarming increase in the overall cesarean rate in the United States and other countries. The process the pregnant woman uses to make the decision to have a maternal request c-section is unknown.

This problem is of considerable concern to nurses. Nurses who work in office settings or public health departments, and obstetrics are in an excellent position to assist pregnant women in deciding their birth options. Obstetrical nurse practitioners and midwives also have an important role to play in providing information on available options. The childbirth educator provides information on childbirth to expectant parents. Labor and delivery nurses must support pregnant women in their decisions, including providing information on birthing options and providing direct patient care regardless of

their birth choices. It is essential that nurses be well informed about the trend toward c-section by maternal request. It is important that nurses understand how pregnant women make this decision.

Research is needed to discover how women make the decision to have a maternal request c-section and what factors influence that decision. There is a significant gap in the literature on this specific topic. Therefore, this study is important to nurses who care for pregnant women throughout the pregnancy, during birth and afterwards. This grounded theory study proposes to discover the decision-making process pregnant women go through and to examine factors that influence them to have a maternal request c-section. A theory will be identified to assist nurses in their contact with pregnant women who may be considering a maternal request c-section.

The Stance of the Researcher

As a neonatal nurse practitioner for 30 years, I have attended many deliveries, both vaginal and c-sections. In the past 5 years, I have seen an increasing number of infants born by maternal request c-sections. I have witnessed the problems these infants faced in making the transition from the womb to the outside world. Many of these infants had respiratory distress at, or shortly after birth, some requiring transfer to the neonatal intensive care unit. As the incidence of infants with breathing difficulty increased in this population, I became concerned about the pregnant woman's choice to deliver by maternal request c-section. I delved into the literature and discovered that this phenomenon was a worldwide problem and researchers all over the world were debating this issue. I became passionate about this and decided to make it the focus of my dissertation. With my first child, I had an emergency c-section because she was a breech

presentation (buttocks first). I was planning a natural childbirth. I felt guilty because I could not deliver her the natural way without anesthesia. My recovery experience was very difficult and complicated by a urinary tract infection and an intestinal ileus (the intestines stop working temporarily). I had significant incisional pain for several weeks.

With my second child, I choose to have a vaginal birth after a previous c-section. I had an epidural and was pain free for the majority of the labor and delivery. After the delivery, I was up walking around about four hours after the birth. My recovery was very smooth, and without complications. My experiences sensitized me and my attitudes toward c-sections. I identified this bias early in hopes to minimize any effects on my interpretation of this study.

Preparation to Conduct the Study

To prepare for the dissertation proposal, I took a two-hour credit graduate level course working with Dr. Jan Brown, a grounded theorist. I also took two graduate level courses on qualitative research, one in the Department of Nursing and one in Child and Family Studies. Grounded theory methods were taught in both courses.

Grounded theory fits well with my research interest: how women make decisions to have a maternal request c-section. It provides a framework to answer my research question. The data collection and analysis procedures allowed me to investigate the process women use in decision-making and identify a core category that explains how women make the decision about their method of childbirth. This study will give women who have experienced choosing a maternal request c-section an opportunity to tell their stories.

Problem Statement

The problem is that low-risk, healthy women are choosing a birth option that is fraught with possible complications, when there is a safer birthing option, specifically a vaginal delivery. Using data from the Health Care Utilization Project, Meikle, Steiner, Zhang and Lawrence (2005) found an increase of maternal request c-section rates from 19.7% of all cesarean deliveries in 1994 to 28.3% in 2001. A retrospective study of 18,653 deliveries in 24 Norway hospitals reported that an incidence of 7.6% of all deliveries were maternal request c-sections (Kolas et al. 2003).

This problem is clinically relevant because of the increasing numbers of women choosing this mode of delivery and because of the health risks to the women and infant undergoing c-section deliveries and the increased cost associated with c-sections. The research problem needs investigation to identify the process of decision-making of pregnant women who have undergone a maternal request c-section. The ultimate goal is to discover interventions to reduce the rate of maternal request c-sections, thereby reducing mortality and morbidity associated with c-section deliveries and reducing health care costs associated with maternal request c-sections.

Purpose of the Study

The purpose of the study reported in this document is to identify a theory of the process women use to make the decision to deliver their babies by cesarean section, instead of having a trial of labor and expected vaginal birth.

Philosophic Underpinnings

A theoretical framework is necessary to describe how researchers come to know human experience (DePoy & Gitlin, 2005). DePoy and Gitlin explain that a theoretical

perspective provides structure and frames the research approach. The use of a theoretical perspective also assists the researcher to move from shared experiences to higher levels of abstraction necessary to devise a theory. The theoretical perspective used for this grounded theory study is based on symbolic interactionism and feminist theory.

Symbolic Interactionism

Symbolic interactionism provides the theoretical framework for grounded theory studies. It is founded on three premises (Blumer, 1969).

1. Individuals act toward things based on the meaning that these things have for them. The term *things* is inclusive of objects, other individuals, groups of individuals, attitudes, activities and situations of everyday life.
2. The meaning of things comes from the social interaction with the self or other individuals. Meanings arise from the way other individuals interact with the individual concerning the thing.
3. Meanings are modified using an interpretative process by the individual as he/she interacts with others. This interpretative process occurs within the mind of the individual as he/she interacts with the self.

The meaning of childbirth for an individual woman depends on her interaction with herself and other individuals. A woman's birth experience is subjective, unique and is molded by interactions with others, such as her mother, partner, friends, family members and health care providers. Pregnant women base their decisions on interpretation of the meaning that childbirth has for them. It is vital for the researcher to understand the meanings that women give to their experiences of childbirth. Human groups exist in action and must be seen in terms of action (Blumer, 1969). The woman

giving birth exists within the group of her friends and family as well as the group of health care providers. The actions that exist within these groups occur in response to one another. Out of this interaction, a joint action arises culminating in the birth of a child. Symbolic interactionism provides a perspective for interpretation of findings as the researcher attempts to understand the meanings of childbirth to the women.

Feminism and Childbirth

The feminist research approach is based on the philosophy of "on women, for women, and by women" (Webb, 1993, p. 422). From the feminist standpoint, according to Wuest (1995), knowledge of an experience or phenomenon comes from the knower, who is a woman. Feminist theory has been used extensively in scholarly nursing research. "Feminist scholarship, with its focus on gender, power and oppression, can provide a unique way of interpreting nursing practice" (Huntington, 2002, p. 274.) Feminist epistemology acknowledges the importance of feminist thought in conceptualizing nursing practice and research (Huntington, 2002). The tenets of feminist theory include:

1. Women's experiences are central.
2. The researcher attempts to see the world from the women's point of view.
3. The researcher aims to improve the circumstances for women amongst others. (Lipp, 2008, p. 11).

All experiences of women are gendered, but the experience of each individual woman is unique (Reinhatz & Chase, 2003). Shields and Dervin (1993) say that feminist research "must be seen holistically and in context and as socially and culturally complex" (p. 66).

The relationship between the researcher and participant is critical in grounded theory methodology and feminism. It is crucial that researchers maintain genuineness and avoid self-disclosure and manipulation during the interview process (Wuest, 1995). Reflection of the researcher's own objectives and biases reduces the effect of gender bias.

There is a meld of symbolic interactionism and the feminist standpoint. The link between symbolic interactionism and the feminist standpoint is that data is socially constructed by the knower (in this case, the woman) and the researcher.

The Research Questions

The problem of concern is that healthy, low-risk women are choosing to deliver by c-section when a vaginal birth is a safer and less costly option. This research was guided by the following research questions:

1. What is the decision-making process by which healthy, low-risk women choose to deliver their infants by cesarean delivery in the absence of medical indications?
2. What antecedents occur to influence a pregnant woman's decision to undergo a maternal request c-section?

A qualitative method, grounded theory, was used to answer the research questions. Since grounded theory methodology will result in a theory of how women choose maternal request c-section, major variables were not identified prior to data collection.

The Aims of the Study

The specific aims of this study are:

1. To gather stories of birth by maternal request c-sections from women who have had these births.
2. To determine what salient factors influence pregnant women to undergo a maternal request c-section, and what perceived consequences the decision had for them.
3. To identify a grounded theory explaining the decision-making process by which healthy, low-risk pregnant women choose to deliver their infants by c-section in the absence of medical indications, instead of a vaginal birth.

The long-term objective is to improve outcomes for mothers and babies, based on a minimal number of maternal request c-sections being performed.

Assumptions

1. All pregnant women want to have a healthy baby.
2. All pregnant women have some apprehension about childbirth.
3. Friends, family, and health care providers influence the women's birth decisions.
4. Women want to tell their birth stories, as they perceived them.
5. Women will tell their birth stories with clarity and accurate recall (VandeVusse, 1999).

Limitations and Delimitations

1. Participants may embellish the events surrounding delivery, although VandeVusse (1999) writes otherwise.
2. The use of theoretical sampling may limit generalizability.
3. The researcher may not interpret interview data as it was meant to be.
4. There may be cultural and/or geographic influences affecting this study.

5. This study was delimited to the 16 area counties surrounding Knoxville, TN.

Summary

Maternal request c-sections pose complications for mothers and infants. The morbidity and mortality rate is higher for pregnant women and infants who are born via maternal request c-section versus vaginal delivery. In addition, a c-section is more costly than a vaginal delivery.

We know that the c-section rate is rising, in part due to maternal request c-sections. We also know that there is increased mortality and morbidity in mothers and infants who undergo a maternal request c-section. We do not know how pregnant women make the decision to have a maternal request c-section, why they choose this method of birth or what factors influence these women. Using grounded theory methods, I discovered a theory of how these pregnant women made the decision to forgo a vaginal delivery and have a maternal request c-section. This theory can be used by nurses who work with pregnant women to guide informed advice, change the way childbirth classes are designed, or design other interventions to reduce the maternal request c-section rate.

II.REVIEW OF THE LITERATURE

In chapter two, I discuss the (a) database search methods, (b) the rising c-section rate,(c) the context, (d) the risks of c-sections to mother and infant, (e) the cost of c-sections, (f) why women choose maternal request c-sections, (g) why physicians comply with the pregnant women's' request, (h) physician factors, (i) the decision making process, and (j) a summary.

Little is known about this decision-making process. Cheung, Mander, Cheng, Chen, and Yang (2006) studied Chinese women and their decision-making process and Wittman-Price (2006) studied an emancipated decision-making model. Cheung's study described five steps in the decision-making process. Cheung's study (2006) may not be generalizable to American women because of cultural and language distinctions. Wittman-Price, and colleagues drew conclusions based on questionable statistical analysis and omitted concepts that may be applicable to the decision-making process. These were the only published studies in English found on the decision-making process of choosing a c-section. It is imperative that the decision-making process be identified and described fully to provide the basis for designing interventions. These interventions include education, advice-giving, childbirth preparation and labor coaching. Understanding the process of decision-making can foster providing women with accurate information about risks and benefits so they can make a truly informed decision. Although the process has not been identified, influences, possible antecedents, context, and intervening factors related to the decision-making process regarding birth options have been discussed by various authors. What is known about these concepts is discussed in the literature review.

There is much known about the rising c-section rate and the mortality and morbidity associated with a c-section. The ultimate desired outcome of the birthing decision is to have a healthy baby and a healthy mother. It is widely known that c-section birth carries potentially serious complications for both mother and baby. Significantly, the cost of having a c-section is approximately double the cost of a trial of labor and a vaginal delivery. A c-section delivery without complications cost $6,946 compared to vaginal delivery without complications ($4,490) in a busy tertiary hospital at Stanford, CA (Druzin & El-Sayed, 2006).

Database Search

A computer database search was done of the literature in the disciplines of health care, social work, psychology, business and political science. The databases utilized included CINAHL, MedLine, PubMed, Ovid, Google, Google Scholar and dissertations. Search terms included cesarean delivery, birth and delivery, maternal request, and patient-choice. Specific terms such as fear, costs, and outcomes were cross- referenced with childbirth and cesarean. Studies published before 1996 were discarded. Approximately 150 articles were initially obtained including quantitative and qualitative research, governmental reports, comprehensive reviews, opinion-editorial articles, and articles designed for the lay public. Because the phenomenon of maternal request c-section is a worldwide problem, articles from many countries were reviewed including the United States, the United Kingdom, China, Scandinavian countries, Taiwan, Canada, Latin American countries, Egypt, Iraq, Bangladesh, France and Italy.

Studies were critiqued based on methodologies, sample sizes, and limitations. See Appendix A for a comparison and critique of 41 selected studies. Of the 41 studies, only

six were based on some type of theory. Articles were discarded if the definition of maternal request c-section was unclear or if there were significant flaws in the study design. The topic was further delimited to specific components of maternal request c-section, including incidence, significance of the problem, why women choose maternal request c-section, and the decision-making process. These topics will be the focus of this section.

The Rising Cesarean Section Rate

The fertility rate for the U.S. was 66.3 per 1,000 live births and the birth rate was 14 per 1,000 estimated population in the year 2004 (Births, Birth Rates, and Fertility Rates, 2004). Merrill and Steiner (2006) reported four million childbirths in U.S hospitals in 2003. The delivery of infants was the most common reason for hospitalizations among the U.S. population (Merrill & Steiner). The cesarean delivery rate in the U.S is currently 32% (CDC, 2008), an increase of over 40% since 1996 (Martin et al., 2006). The target cesarean rate for low risk pregnant women is 23.9% as set by Healthy People 2020 (U.S. Department of Health and Human Services, n.d.).

Many authors have speculated on the reasons for the increasing cesarean section rate including increasing use of technology during labor, malpractice concerns for physicians, a change in the demographics of women becoming pregnant, and a decrease in vaginal birth after cesarean section rates due to healthcare provider's fears of uterine rupture, a life threatening complication. A decrease in vaginal births after cesarean section has led to an increase in repeat cesarean sections.

The increasing rate of maternal request c-sections may be contributing to the increasing cesarean section rate. Incidence on the rate of maternal request c-section in the

United States is based on estimates of specific cohorts of patients, and/or hospital rates. McCourt et al. (2007) estimated a rate for maternal request c-section at 0.3-14% of all c-sections in the U.S. based on a literature review from 17 studies in 33 states including over 7 million discharges. Using data from the Health Care Utilization Project, Meikle, and colleagues (2005) found an increase of maternal request c-section rates from 19.7% of all cesarean deliveries in 1994 to 28.3% in 2001. A retrospective study of 18,653 deliveries in 24 Norway hospitals reported an incidence of 7.6% of all deliveries were maternal request c-section (Kolas et al. 2003). Data on birth rates are derived from birth certificate data, which does not differentiate between primary (first), repeat, cesarean sections with medical indications and maternal request c-sections.

The Context: Medicalization of Childbirth from a Feminist Perspective

The maternal request c-section is the best example of the medicalization of childbirth. This section will describe the evolution of the process of medicalization of childbirth through a feminist lens. The medicalization of childbirth has evolved as more physiologic knowledge of childbirth has been developed. The definition of medicalization is "to identify or categorize (a condition or behavior) as being a disorder requiring medical treatment or intervention" (Medicalize, 2009). Pregnant women have become patients in the sense that they have entered medical institutions and allowed a cadre of medical experts to shape one of the most important life events of women (Parry, 2008). Many women are using discourse to attempt to wrestle the management of childbirth back into the woman's realm.

Feminist research is research for women, about women and by women. Physiologic childbirth is uniquely a female experience. "Women are the true *dramatis*

personae of childbirth" (Oakley, 2005, p. 151). For this study, it is important to review feminism as a context for discussing the medicalization of childbirth. Before the advent of technology for childbirth, most women gave birth at home assisted by a lay midwife, a family member, or a physician. Birth was considered a natural process and labor contractions were to be expected and endured.

Childbirth shifted from home-based to hospital-based largely because of the availability of insurance and pain control (Beckett, 2005). When childbirth was moved into the hospital and treated as an illness, physicians began to assume care for pregnant women. Physicians, mostly male, tended to dominate women. Condescending statements have been made, such as, "Now, don't worry your pretty little head about this. We're the ones that went to medical school" activist Suzanne Arms said in an interview with Zwelling (2002). Childbirth was seen as a risky process to be managed in a hospital. "Routine medical practices regularly disregard and disrupt the natural rhythms of labor and often fail to support a woman's inherent capacity to give birth" (Boston Women's Health Book Collective, 2005, p. 421).

New technology began to affect how women were treated during the birthing process. Beckett (2005) described how feminists (no names provided) became concerned that women delivering vaginally were not offered pain relief for labor contractions in the 1940's, which led to the use of ether and scopolamine which were later found to be harmful to the infant (Leavitt, 1984). The pain from labor contractions was politicized to the extent that women began to press for the right to analgesia and to control their bodies. However, our cultural Puritanical roots, followed by a Victorian revulsion toward the female body played a role in childbirth practices (Zwelling, 2002) in the 1940's and

1950's. The relief of labor contractions became a feminist issue. Vivilaki and Antoniou (2009) suggest that the experience of pain relief may create emotional pain such as guilt, which is not easily resolved. According to Vivilaki and Antoniou, pain relief from contractions makes a woman more vulnerable so that she may feel powerless and out of control. The authors' state that the hazards of pain relief are generally ignored which promotes further medicalization of care.

Analgesia for contractions and childbirth is not without risk. Sedatives and narcotics may result in decreased uterine activity (slowing labor), cause drowsiness and result in respiratory depression in infants if given too close to birth. Regional anesthesia (epidural and spinal anesthesia) may result in transient fetal bradycardia, maternal hypotension resulting in decreased uterine blood flow to the fetus, nausea and vomiting and urinary tract retention in the mother (Smith, 2004).

In the 1960-1970's, there was a shift toward natural childbirth. The emphasis was to treat childbirth as an important family life experience and not a medical event although most births remained hospital-based. As technology improved, childbirth shifted from being expected, "natural" to becoming a medical problem (e.g. a pathologic event) (Shuval, & Gross, 2008). Childbirth has become medicalized, as demonstrated by the use of advanced technology such as fetal heart rate monitors, intravenous fluids, confining women to bed, and using oxytocin to initiate or augment labor. In the last 20 years, the medicalization of childbirth has continued with an increase in labor inductions (artificial starting of labor using medications), the use of epidurals for pain relief, sonograms and the option of maternal request c-sections. Labor inductions have increased with rates as high of 21% of all births in the U.S. (Durham et al., 2008). The use of epidural anesthesia

for pain relief has reached 80-90% in some institutions (Cubera & Montgomery, 2004). The use of increased technology in childbirth has made American women lose faith in their ability to give birth vaginally (Lothian and Grauer, 2003).

Technologies have altered the relationship between nature and culture according to Oakley (2005). Oakley, a prominent feminist, suggests, "Women can only be women with expert (mostly male) professional help" (p. 119). She goes on to ask a question. "Who is having a baby: the mother, the medical profession, the hospital, the family, the state?" (Oakley, 2005, p. 123).

Television reality programs make birth appear less natural and more medical than ever. "Babies: Special Delivery" is a reality show showing labor and births of both low-risk and high-risk mothers (Neimack, 2005). These programs show women birthing amid many technological interventions that may be unnecessary for the low-risk, healthy pregnant woman. Suzanne Arms in the Zwelling interview (2002) believes that the interest in reality birthing television stems from a deep need to see and know about birth.

Some feminists now believe that the "high-tech approach to birth and analgesia denies women the experience of childbirth and inhibits their ability to experience the empowerment that results from knowing that one is capable of bringing forth life" (Beckett, 2005, p. 257). Beckett (2005) states that the use of technology may be empowering for women and that "medicalization of childbirth is not incompatible with feminism and/or women's interests" (p. 262). The key issue is that women need unbiased access to information in order to choose to utilize technology or not (Shaw, 2007).

A maternal request c-section is the epitome of medicalized childbirth. "I think we are potentially one generation away from being a society that no longer gives birth

vaginally" were words spoken by Professor David Elwood at the Royal Australian and New Zealand College of Obstetricians and Gynaecologists conference reported by Darby (2005). The maternal request c-section is depicted as an "intervention that has been ritualized by medicine to increase medicine's control over birth" (Lee & Kirkman, 2008). Kukla et al. (2009) states that "pregnant women are under intense cultural pressure to make whatever choice is safest for their baby" (p. 6). Many women have been led to believe that a maternal request c-section is safer than a vaginal birth. In the section on why women choose c-sections, I discuss this further.

Authors of "Our Bodies, Our Selves" (Boston Women's Health Book Collective, 2005) discuss solutions to refocus society on childbirth as a natural process, not a medical one. They posit that the media should focus on the 4 million women who give birth vaginally and have a healthy baby and avoid the use of medical jargon by health care providers to encourage women that childbirth is a natural process. Health care providers should follow evidence-based obstetrical care that supports fewer medical interventions in the healthy, low-risk woman. An increase in the use of midwives who provide prenatal care for healthy women allow women to make choices about the interventions that are optional according to evidence based nursing. Midwives support delivery at home, in birthing centers and in hospitals depending on the desires of the pregnant women.

In summary, the medicalization of childbirth continues despite attention from feminists. Patriarchal obstetrical physicians dominate our society and continue to exert control over childbirth. Maternal request c-sections typify the medicalization of childbirth. The medical culture that has resulted in the acceptance of maternal request c-section as a safe option for childbirth needs to shift back to the popularity of vaginal birth

for the safety of the mother and baby. Pregnant women need clear information about the options of childbirth, including essential discussions about childbirth with their healthcare providers in order for women to make the decision that is best for them.

Risks of Cesarean Deliveries

Some healthcare providers believe a maternal request c-section is just another option to give birth (Wax, Cartin, Pinette & Blackstone, 2005) and minimize the risks of a c-section to mother and infant. However, no studies exist to indicate that maternal request c-sections are safer than vaginal births. There are no randomized controlled trials comparing different modes of delivery, nor would it be possible to conduct such trials. However, there are risks to the mother and infant who undergo cesarean section. Studies do provide information about implications for health and costs.

Maternal Risks

Women giving birth by cesarean section were 3.6 times more likely to die as women in the vaginal delivery group in a study by Deneau-Tharaux, Carmona, Bouvier-Colle and Bréart (2006). Deneau-Tharaux and her colleagues studied 65 maternal deaths over a five year period in France. Kim (2010) reports a significant increase in maternal deaths in California from 5.6 per 100,000 in 1996 to an astounding 16.9 per 100,000 live births in 2006. Morton of the California Maternity Quality Care Collaborative says that the rise in mortality rates may be related to the increase in maternal request c-sections (Kim).

Lui and her colleagues (2007) used information from a Canadian database to study 46,776 women in the planned cesarean group and over 2.2 million in the planned vaginal group. Severe morbidity rates were reported as 27.3% in the planned cesarean

group compared to 9% in the planned vaginal birth group. Complications associated with cesarean deliveries included hemorrhage requiring hysterectomy, anesthetic complications, thromboembolism, major puerperal infection, wound disruption, and wound hematoma (Lui et al. 2007).

Declercq et al. (2007) using a Massachusetts database of 244,088 women, found that mothers who underwent planned cesarean sections had a significant statistical increased rate of rehospitalization within 1 month after delivery compared to mothers who delivered vaginally (19.2 vs. 7.5 per 1,000 live births for the vaginal group). Rehospitalizations were primarily due to wound related complications, especially infection.

The old adage "once a section, always a section" still applies today. Therefore, with the increasing cesarean section rate, the incidence of repeat cesarean sections will increase. With each subsequent cesarean section, there is an increasing risk of placenta previa, a condition where the placenta grows over the opening of the uterus. When the cervix starts to dilate with labor, significant bleeding can occur endangering the mother as well as the infant, and necessitating a c-section. The risk of placenta previa in the next birth is 50% higher than with the first cesarean birth (Getahun, Oyelese, Salihu & Ananth, 2007). Placenta accreta, where the placenta grows into the uterine musculature, also increases in subsequent pregnancies. Placenta accreta is treated by removal of the uterus resulting in subsequent sterility (Druzin & El-Sayed, 2006).

In subsequent pregnancies after the initial c-section, there is also a risk of uterine rupture if labor ensued. This complication is life threatening for both mother and fetus.

In a systematic review Guise et al. (2004) reported a risk of uterine rupture rate of 7.8 per 1,000 live births in one large study.

Infant Risks

Neonatal mortality rates for c-section births were significantly higher than for vaginal births (2.85 vs. 1.83 per 1,000 live births according to MacDorman, Declercq, Menacker, and Malloy (2006)). MacDorman and his colleagues studied a cohort of 5.7 million births to low risk women in the United States.

Kolas and colleagues (2006) reported that infants born by planned c-section had approximately double (9.8% vs. 5.2%) the risk of admission to the neonatal intensive care unit than infants in born by vaginal delivery. Kolas et al. used a sample size of 18,653 in this study. Infants had twice the risk of serious breathing difficulties in the planned cesarean group (Kolas et al. 2006). These conditions included transient tachypnea of the newborn (TTN). Fogelson, Menard, Hulsey and Ebeling (2005) reported an incidence of TTN in infants born by c-section at 6% compared to 1.7% born by vaginal delivery. TTN has been associated with childhood respiratory symptoms such as wheezing (Liem, Huq, Ekuma, Becker & Kozrskyj, 2007) and childhood asthma (Birnkrant et al., 2006). Infants who did not experience a trial of labor may not have received the benefits of the endogenous steroids and the catecholamine surge that occurs during labor to assist the infant in clearance of fetal lung fluid at birth (Jain & Eaton, 2006). This may partially explain the respiratory conditions seen in maternal request c-section infants.

Infants born via c-section are at increased risk for many complications, including a delay in maternal bonding caused by a prolonged time between birth and the mother holding the infant (Rowe-Murray & Fisher, 2001). In addition, Rowe-Murray and Fisher

(2001) reported a decrease in mother-baby skin-to-skin contact after c-section compared to a vaginal delivery group.

Breastfeeding is an important source of nutrition for the infant, as well as immunity and positively affects maternal-infant bonding. Infants born by maternal request c-section had a significant delay in initiation of breastfeeding (Cakmak & Kuguolgu, 2007; Rowe-Murray & Fisher, 2002). Dewey, Nommsen-Rivers, Heinig and Cohen (2003) reported that infants born via c-section had suboptimal breastfeeding behaviors, excessive weight loss, and the mothers had delayed onset of lactation.

Costs of Cesarean Deliveries

Maternal request c-section births are associated with increased direct costs when compared to vaginal births. A c-section delivery in 2006 without complications cost $6,946 compared to vaginal delivery without complications ($4,490) in a busy tertiary hospital at Stanford, CA (Druzin & El-Sayed, 2006). Figures by Declercq and colleagues (2007) were slightly different overall, but the trend was the same with a planned c-section costing $4,372 versus $2,487 for a vaginal delivery. This data was based on 470,857 birth certificates in Massachusetts. If complications arise after the c-section, costs are increased further. Costs in subsequent pregnancies rise as placenta implantation complications occur (Druzin & El-Sayed). The increased length of hospital stay that occurs with maternal request c-section also increases costs. The average length of hospital stay for a mother after a cesarean section is 4.3 days versus 2.4 days for a vaginal delivery (Declercq et al.). Hospitals report higher occupancy rates, which leads to reduced patient satisfaction (Druzin & El-Sayed).

If the infant requires admission to the neonatal intensive care unit, costs increase significantly. The cost for 24 hours in the neonatal intensive care unit ranges from $1,000 to $2,500 (March of Dimes, 2008). Providers and insurers must consider the impact of the maternal request c-section in increasing health care costs.

Why Women Choose C-sections

Women make choices regarding their birth options based on a variety of internal and external influences. Internal influences include personality, how they view childbirth and what constitutes "becoming a mother" (Kiehl & White, 2003; Park, Yeoum & Choi, 2005). Previous traumatic birth experiences (Hofberg & Brockington, 2000), preexisting emotional problems (Saisto, 2001), and/or a history of physical or sexual abuse (Nerum, Halvorsean, Sorlie, & Ølian, 2005) may influence their decision. External influences include family members, friends, the media (Internet, television, newspapers and magazines), and health care providers. Societal influences also play a role. Celebrities who have chosen maternal request c-section may influence women who want to emulate them and their childbirth experience. Celebrities like Posh Spice from whence the British tabloids coined the phrase "too posh to push" (Feinmann, 2002; McFarlin, 2004) and Britney Spears brought to light the notion that a maternal request c-section is a viable birth option (Cassidy, 2007). There are some specific reasons that women choose maternal request c-sections. These include perception of increased fetal safety, fear, convenience, and retaining pre-pregnant body shape and function.

Perceptions of Fetal Safety

Almost all pregnant women are concerned about the well-being of the fetus and want to provide a safe uterine environment. They desire a delivery as atraumatic for the

infant as possible. Many women believe that maternal request c-section is safer for the fetus than a trial of labor and expected vaginal birth. Concerns for fetal safety were reported in qualitative studies by Bryant, Porter, Tracy and Sullivan (2007); Cheung et al. (2006); Wax, Cartin, Pinette, and Blackstone (2005); and Weaver and Stratham (2005). Bryant et al. (2007) identified two influences regarding the perception of fetal safety. First, mothers perceived that protection of the fetus was their duty and was a part of their role attainment as a mother. Second, physicians may unwittingly or intentionally imply that a maternal request c-section is safer for the fetus. Bryant and colleagues related that physicians implied a maternal request c-section was an "orderly and controlled birthing option" (Bryant et al., p. 8) compared to a vaginal birth as "disordered and potentially out-of-control" (Bryant et al., p. 8). One mother recounted her obstetrician saying that he was not sure he could get the best team together at three in the morning if an emergency c-section was needed. Therefore, a scheduled maternal request c-section was preferred. These types of off-hand remarks made by healthcare providers may influence a woman toward a maternal request c-section (Bryant et al.).

Fear

Many women have fears and anxiety during pregnancy about the well-being of the fetus and the up-coming delivery. Saisto (2001) reported in his dissertation that women expressed fears of tearing of the perineum (19%), intolerable pain (15%), and hemorrhage (3%). In a qualitative study of 10 women with childbirth associated anger, Mozingo, Davis, Thomas, and Droppleman (2002) reported fear for safety of the infant.

Fears are exaggerated in some women leading to a request for a c-section. Wax and colleagues (2005) surveyed 110 male and female obstetricians in Maine and found

that 33.3% of obstetricians had a fear of childbirth for themselves or their partner. Saisto and Salmela-Aro et al. (2001) found that eight percent of all c-sections in Finland were done because of maternal fears.

Hofberg and Brockington (2000) described a condition known as tokophobia, a fear of death in childbirth in which the fear precedes pregnancy. Women were afraid they would die if forced to give birth vaginally. In this qualitative study done in the United Kingdom, 26 women who expressed fear in an office visit were interviewed. Eight women had a dread of childbirth that began in adolescence. Fourteen women experienced tokophobia after a previous traumatic delivery, and about half of these women chose a maternal request c-section. Lothian & Grauer (2003) suggested that watching television programs that depict mothers giving birth, may instill fears in women who plan to undergo vaginal birth.

Convenience

Convenience is defined as "fitness or suitableness, as of place, time; freedom from discomfort, difficulty, or trouble; ease; and accommodation" (Definition of convenience, n.d.). Walker, Turnbull, and Wilkinson (2004) found that 53% of 148 women surveyed strongly agreed or agreed with the statement "People tend to think of cesarean section as a more convenient way to give birth," and 44% strongly agreed or agreed with the statement "Cesarean section is now seen as a routine way of having a baby" (p. 121). Twenty-three percent of participants agreed that the media portrays maternal request c-section as "better" than vaginal delivery. Wax and colleagues (2005) found that 8.3% of obstetricians surveyed cited convenience as a reason for giving birth by maternal request c-section. Cheung et al. (2006) described one Chinese woman who

based her decision to have a maternal request c-section on a particular date chosen by a fortuneteller and a day most convenient for her. Lo (2003) suggested that an increased rate of c-sections in the U.S. may occur in the last week of December so parents can take advantage of the tax deduction.

Retaining Pre-pregnant Body Shape and Function

Many women are concerned about retaining function of the rectum, anus, bladder, and vaginal tone. Some women are afraid that having a vaginal delivery will damage these internal organs. Fourteen out of 28 Chinese women believed having a maternal request c-section would preserve the body shape and function, prevent pelvic floor prolapse and preserve sexual satisfaction according to Cheung et al. (2006). Twenty-seven percent of U.S. obstetricians surveyed by the Wax team (2005) reported that they would have a maternal request c-section for themselves for similar reasons. Pelvic floor disruption, damage to the pudendal nerve, sexual dysfunction and stress incontinence may occur with traumatic or assisted vaginal deliveries (Hicks, Goodall, Quarttrone & Lydon-Rochelle, 2004; Rogers & Leeman, 2007). However, Genadry (2006) reports that defects of the pelvic floor are directly caused by traumatic vaginal delivery. There is no consensus that planned cesarean delivery preserves the pelvic floor, prevents urinary incontinence or anorectal dysfunction.

Why Physicians Comply with Women's Requests

A 2001 statement by the American College of Gynecologists and Obstetricians (ACOG, 2003) indicated that "If the physician believes that cesarean delivery promotes the overall health and welfare of the woman and her fetus more than vaginal birth, he or she is ethically justified in performing a cesarean delivery" (ACOG, p. 1105). Based on

that recommendation, many obstetricians have complied with mothers' requests for a maternal request c-section. Wax, Cartin, Pinette, and Blackstone's (2005) survey of obstetricians in Maine revealed that 84.5% were willing to perform a maternal request c-section. The health care provider's role when counseling a pregnant woman who requests a c-section, is to provide information on the risks and benefits of a maternal request c-section as well as vaginal birth. An open dialogue between patients and providers is essential for a woman to make an informed birth choice. One physician in a qualitative study by Bryant et al. (2007) believed that obtaining informed consent was the same as providing adequate information on birthing options. Information on the risks and benefits of a c-section would require a conversation 1-2 hours in length and obtaining informed consent took much less time (Bryant et al.).

Physician Factors

Traditionally, the role of the obstetrician has been paternalistic, and women complied with the physician's recommendations based on the power differential between the physician-patient and perhaps male-female roles. Physicians may push their patient toward a maternal request c-section with remarks that imply a c-section may be needed (Lothian & Grauer, 2003). Lee and Kirkman (2008) called these physicians "birth bullies" (p. 453). Anecdotal evidence from women suggests that remarks such as "you've got a big baby in there" or "you've got a prominent tailbone" make women believe that vaginal birth may be difficult and therefore they "request" a cesarean delivery.

Timing of c-section deliveries is important to physicians. Physicians have to juggle office visits, surgeries, and deliveries during the day. Vaginal deliveries and emergency cesarean deliveries may keep a physician awake all night and result in

significant fatigue. Planned elective cesarean deliveries can improve the schedule of the physician who schedules deliveries at his/her convenience (Brown, 1996). Fewer cesarean deliveries were likely to be done on Sunday, indicating that weekday cesarean deliveries are scheduled for the obstetrician's convenience (Brown; Lo, 2003). Brown also found that physician leisure was a significant predictor of total and unplanned c-section deliveries, or though nature distributes spontaneous vaginal births uniformly. Bateman (2004) reported fewer c-section deliveries on weekends and after 5 pm on weekdays.

Financial incentives may induce physicians to push a pregnant woman toward an elective c-section delivery. Tsai and Hu (2002) reported that physicians in Taiwan had increased c-sections rates if the previous month's income level was lower than expected. A c-section takes about 30 minutes compared to managing a labor patient and performing a vaginal delivery which may take up to 12 hours or more (Penna & Arulkumaran, 2003). Therefore, it is cost effective for the physician to perform elective c-sections.

Obstetricians have been accused of practicing defensive medicine by ordering excessive tests, utilizing technology when it is not indicated, and performing maternal request cesarean deliveries. Obstetricians have become more dependent on medical technology and less on their own clinical judgement. Defensive medicine arises from a perceived threat or actual threat of legal action. The law and the practice of obstetrics are closely related because litigation produces changes in practice and shapes clinical standards (Penna & Arulkumaran, 2003).

The c-section rate continues to rise, and malpractice claims have not decreased (Penna & Arulkumaran, 2003). Physicians practicing obstetrics are increasingly being sued (Cohen & Schifrin, 2007; Mavroforou, Koumantakis & Michalodmitrakis, 2005). Although most obstetricians are sued for not doing a c-section when indicated, obstetricians can also be sued for complications that result from performing a maternal request c-section. Considering the risks of c-section to the mother and infant, common sense dictates that performing unnecessary c-sections would result in more lawsuits.

The composition of the obstetrical or physician practice may affect cesarean delivery rates. In large practices, a woman may choose a maternal request c-section to secure her particular physician to perform the delivery. Female obstetricians tend to perform fewer maternal request cesareans than their male counterparts (Ghetti, Chan, & Guise, 2004). Seventeen percent of female obstetricians would prefer to have a c-section by maternal request (Al-Mufti, McCarthy, & Fisk, (1997). Female physicians are also less likely to be sued (Chauhan et al. 2005).

In summary, physicians play an important role in a woman's decision to have a maternal request c-section. Convenience, physician fatigue, and legal issues play a role in a physician encouraging a woman toward a maternal request c-section.

Decision-Making Processes

Decisional science is becoming an important area of study in health care. In a Canadian study, authors found that women make 71% of the health care decisions for themselves and their families (O'Connor, Jacobsen, & Stacey, 2002). There is a significant gap in the nursing literature on consumer (patient) decision-making (Noone, 2002). Pierce and Hicks (2001) state that "few nurse scientists have focused their

endeavors on this important and robust field of inquiry" (p. 267). These gaps include the (a) complexity of decisions, (b) the difficulty of evaluating possible outcomes or consequences, (c) the psychological and physical state of the patient, (d) risk perceptions, (e) environmental stressors and (f) sources of information (Pierce & Hicks).

Health care decision-making is complex. Most pregnant women are "healthy individuals who are capable of making decisions about giving birth" (Simmonds, 2008, p. 360). However, women making health care decisions may be under emotional stress and are asked to predict how they would feel about possible outcomes (McCaffery, Irwig & Bossuyt, 2007).

Patients have now become consumers of health care instead of passive receivers of health care. Previously, patients were thought to lack knowledge about their health care. Values and preferences were not elicited, and the current psychological state was not considered when physicians made healthcare decisions for patients (Pierce & Hicks, 2001). The paternalistic paradigm of decision-making of the past has lost ground and consumers are increasingly collaborating with health care providers in the decision making process. Noone (2002) describes decision-making attributes as "an intentional choice between two or more discrete options; based on recognition of a stimulus for action; commits a person to a path of action; and expects to accomplish a specific goal or goals" (p. 27).

Mazur, Hickam, Mazur and Mazur (2005) studied 200 patients regarding shared decision-making for invasive procedures including upper and lower endoscopy, bronchoscopy, cardiac catheterization, biopsies, and interventional radiological procedures. Sixty-three percent of patients preferred shared decision-making. Because of

the low number of women in the sample, the authors said the study might not be generalizable to other groups of women. Kremer, Ironson, Schneiderman, and Hautzinger (2007) reported that shared decision-making reduced decisional conflict in groups of people who made decisions regarding taking HIV/AIDS medications.

Cheung et al. (2006) used a qualitative approach to explore the decision making process used for maternal request c-section in Chinese mothers. They identified a process women undergo when exploring birth options. This process may not be generalizable to American women. The first step in the process was defining the problem and forming expectations. During this step, women considered their internal reasons for wanting a maternal request c-section, such as fear of labor pain or concerns about fetal well-being.

The second step consisted of collecting information from a variety of sources including immediate and extended family members, friends, media (including the Internet), and healthcare professionals. The availability of information for some women in this study was limited by their geographic location. In the two smaller cities, women indicated that childbirth classes were offered but not helpful or they were too busy to attend. Authors of the study indicated that many decisions were based on less than accurate information. In the U.S., the influence of the media on a woman's choice is unknown. Television programs showing real births may influence a woman's decision regarding her birth options (Lothian & Grauer, 2003). Programs may glamorize maternal request c-section birth and not show women during the prolonged recovery period or they may show successful vaginal deliveries. "Babies: Special Delivery" is a reality show showing labor and births of both low risk and high risk mothers (Neimack, 2005).

During the third step, women investigated what alternatives were available to them. Options for Chinese women often depended on their providers and the hospital facilities in their region. In addition, Chinese women are limited by the government to one child. Therefore, Chinese women are especially concerned about having the least traumatic delivery for the infant.

During the fourth step, the Chinese women selected the appropriate method of delivery for them. Women based their decision on internal factors, and information they obtained. This step was the most difficult for the women in the study. Many decisions were based upon what women believed was best for the infant, not necessarily what was best for themselves.

Step five was the implementation of the decision which posed difficulty for Chinese women because they often had to convince their healthcare provider to perform a maternal request c-section. Sometimes this required insistence that a pregnant woman had a right to choose when the obstetrician did not agree with her choice. However, this decision model did not account for satisfaction with the decisional outcome.

Other models similar to Cheung's et al. (2006) model for decision-making exist. Early decision-making models in business and psychology focused on decision-making under ideal circumstances, inconsiderate of individual values, and preferences. Other models suggest using a balance sheet listing the pros and cons of a decision (Noone, 2002). Noone states that "naturalistic decision-making theory posits that decisions are made in a dynamic, contextual environment and are influenced to varying degrees by different personal and situational factors" (p. 23).

Another model, Wittman-Price's of emancipated decision-making (2006), examined infant feeding methods in 97 women to determine if women used the emancipated decision-making model for this decision. The author devised five subconcepts, personal knowledge, social norms, flexible environment, reflection and empowerment. She used satisfaction with the decision as an outcome variable. The concepts of personal knowledge and flexible environment were the most important subconcepts identified. The study had limited generalizability because the population was primarily white, upper-middle class, and well educated. In addition, it may have been difficult for new mothers to complete the questionnaires while in hospital due to visitors, discharge teaching, baby care, and personal care.

Decision aids are important to clinicians to assist with involvement of patients in the decision-making process. A decision aid is defined as an "intervention that provides information on the clinical options and outcomes relevant to a person's health and is designed to help people make specific and deliberative choice in their health care" (McCaffery, Irwig, & Bossuyt, 2007, p. 619). Decision aides help the patient understand the possible outcomes of their decided upon therapy, thereby increasing adherence to the treatment.

Spring (2008) expresses concern relating shared decision-making to evidence based practice. She states that there is a gap of "resources available to support evidence-based decision-making" (p. 868). Health care providers may find that clinical decision-making may not be possible in the milieu of evidence-based interventions. Intuitional decision-making is "more sophisticated and more capable of making decision that is in context" (p. 868). However, intuitional decision-making is the undesirable method of

decision-making, perhaps not supporting evidence-based practice. Spring offers this solution: decision algorithms including evidence resources and patient preferences should be integrated satisfying the use of evidence-based practice and shared decision-making.

Satisfaction is defined as "fulfillment of a need or want, a source or means of enjoyment, and convinced or assurance of certainty" (Satisfaction, 2009). Satisfaction is the most commonly used outcome of patient care (Mahon, 1996). Satisfaction is linked to patient expectations (Mahon). Satisfaction with decision-making is defined as "a positive feeling about a decision that successfully meets the client's expectations and incorporates the client's values on which the client is the ultimate authority" (Wittman-Price, 2006, p. 378). Holmes-Rovner et al. (1996) described satisfaction with decision-making "to be negatively correlated with decision conflict (the extent of uncertainty and confusion in choosing a course of action). It should be positively correlated with decision confidence" (p. 59)."

Regardless of the decision, patients are more satisfied with their care when encouraged to participate in the decision-making process. Wills and Holmes-Rovner (2003) reported that 86% of patients preferred to make their own decision or to share decision-making with their healthcare provider. These patients were more satisfied with their decision-making.

Harrison, Kushner, Benzies, Rempel and Kimak (2003) studied 47 high-risk, pregnant women as they made decisions about their care. They found that the majority wanted to be actively involved in decision-making about their care. They did, however, identify a group of women who preferred that the nurses and doctors make the decisions for them. This was a qualitative study using constant comparative methods to detect

similarities and differences in the participant's experiences. A sense of risk underlined the women's decision-making process. The authors stated that women made choices based on their concern for safety of the infant, and less so for their own safety. Two themes emerged: active and passive involvement. Some women wanted to be involved in decision-making but struggled with care providers to get the information they needed. Other women used negotiation and patient advocates to be involved in their decision-making. These women were satisfied with their role in the decision-making process. A minority of women were dissatisfied with their involvement. The participants felt powerless, uninformed and left out of the decision-making process. Three women verbalized anxiety because they felt pressured to be a part of active decision-making, while they desired that health care providers make decisions for them.

Two methods of decision-making have been identified in the literature related to women choosing their birth options. More needs to be understood about the experiences of these women as they make their choices.

Summary

Extant literature indicates that the c-section rate is increasing and maternal request c-sections are responsible for some increase in the overall c-section rate. Women and infants who undergo a maternal request c-section are at higher risk for complications than women who undergo a vaginal birth. Women have voiced some reasons for requesting a maternal request c-section, including fears, concerns about fetal safety, convenience, and retained pre-pregnant body shape and function. However, there is little literature available on how American women make that important decision to have a maternal request c-section. That is why this grounded theory study is important.

My research study builds upon other qualitative studies. Discovery of the decision-making process in women in the U.S. is crucial to reduce the rate of c-sections. Information revealed by my study will result in increased knowledge of the decision-making process and reveal what factors influence women to have a c-section by maternal request.

III. METHODOLOGY

In this section, I discuss grounded theory methods, including an explanation of method chosen, sampling, data collection, and data analysis. To answer my research questions, I chose to use a qualitative method. Qualitative methods were essential to discover a woman's lived experience. The specific experience I wished to understand was the way women made the decision to have a c-section. The best way to find out was to ask those women. Quantitive analysis would not yield the type of data needed to answer the research questions. Therefore, I chose the qualitative method of grounded theory.

I used grounded theory research as a form of qualitative research in which a theory of causation is built "from the ground up," grounded in the data (Glaser & Strauss, 1967). Grounded theory methodology provided a systematic set of procedures (Strauss & Corbin, 1990) to develop an inductively derived grounded theory about a phenomenon, in this case the decision-making process of the pregnant woman. The purpose of the methodology was to build a theory that was faithful to and illuminates the area under study. Grounded theory methodologies have evolved since first developed by Barney Glaser and Anselm Strauss, (1967) Professors in Sociology at the University of Chicago. They published their only book together, the *Discovery of Grounded Theory* (1967). Glaser and Strauss brought the grounded theory methods to the Nursing Department at the University of California, San Francisco (UCSF). Glaser and Strauss made a significant impact on the nursing faculty and students while at UCSF, educating the first cohort of grounded theorist nurses (May, 1996). After working together for several years, the two authors had a conflict over the meaning and methods of grounded theory. While Glaser stayed with his grounded theory procedures, Strauss went in a different direction

and joined with Juliet Corbin, a nurse, to further develop the method (Charmaz, 2006). Strauss died in 1996. However, Juliet Corbin continued to promote their interpretation of grounded theory methodology.

Although grounded theory was introduced in the realm of sociology, nurses have used grounded theory in multiple studies. "A woman centred service in termination of pregnancy" (Lipp, 2008, p. 9) and "Smoking and pregnancy" (Kennison, 2009) are excellent examples of the use of grounded theory in nursing. Nurse leaders such as Phyllis Stern, Janice Morse, and Judy Wuest have used the grounded theory methodology and have published extensively. Phyllis Stern published "Founding and processes of the International Council on Women's Health Issues: Attentive partnering, the first 19 years" (Stern, 2003), and "Tactful monitoring: How Thai caregivers manage their relative with schizophrenia at home" (Dangdomyoung, Stern, Oumtanee & Yunibhand, 2008). Janice Morse wrote "The cultural sensitivity of grounded theory" (Morse, 2001). Judy Wuest co-wrote a study on a "Theoretical understanding of abusive intimate partner relationships that become non-violent: Shifting the pattern" (Wuest & Merritt-Gray, 2008), the "Effects of past relationship and obligation on health and health promotion in women caregivers of adult family members" (Wuest, Hodgins, Malcomb, Merritt-Gray & Seaman, 2007) and "Connected and disconnected support: The impact on the caregiving process in Alzheimer's disease" (Wuest, Ericson, Stern, & Irwin, 2001).

I chose the grounded theory approach of Strauss and Corbin (1990) because the authors provided detailed procedures while allowing flexibility within the method. I also chose this method because it was a good fit with the research questions. Grounded theory methods were the ideal methodology to explain the process of decision-making. The

theoretical framework consistent with grounded theory supported a method to answer the research questions. Symbolic interactionism (Blumer, 1969) was the theoretical framework. The primary premise was that *objects* (thoughts, attitudes, individuals, items, etc.) have meaning for that individual and the individual derives the meaning through social interaction with herself and others. Figure 1 represents the major steps of grounded theory.

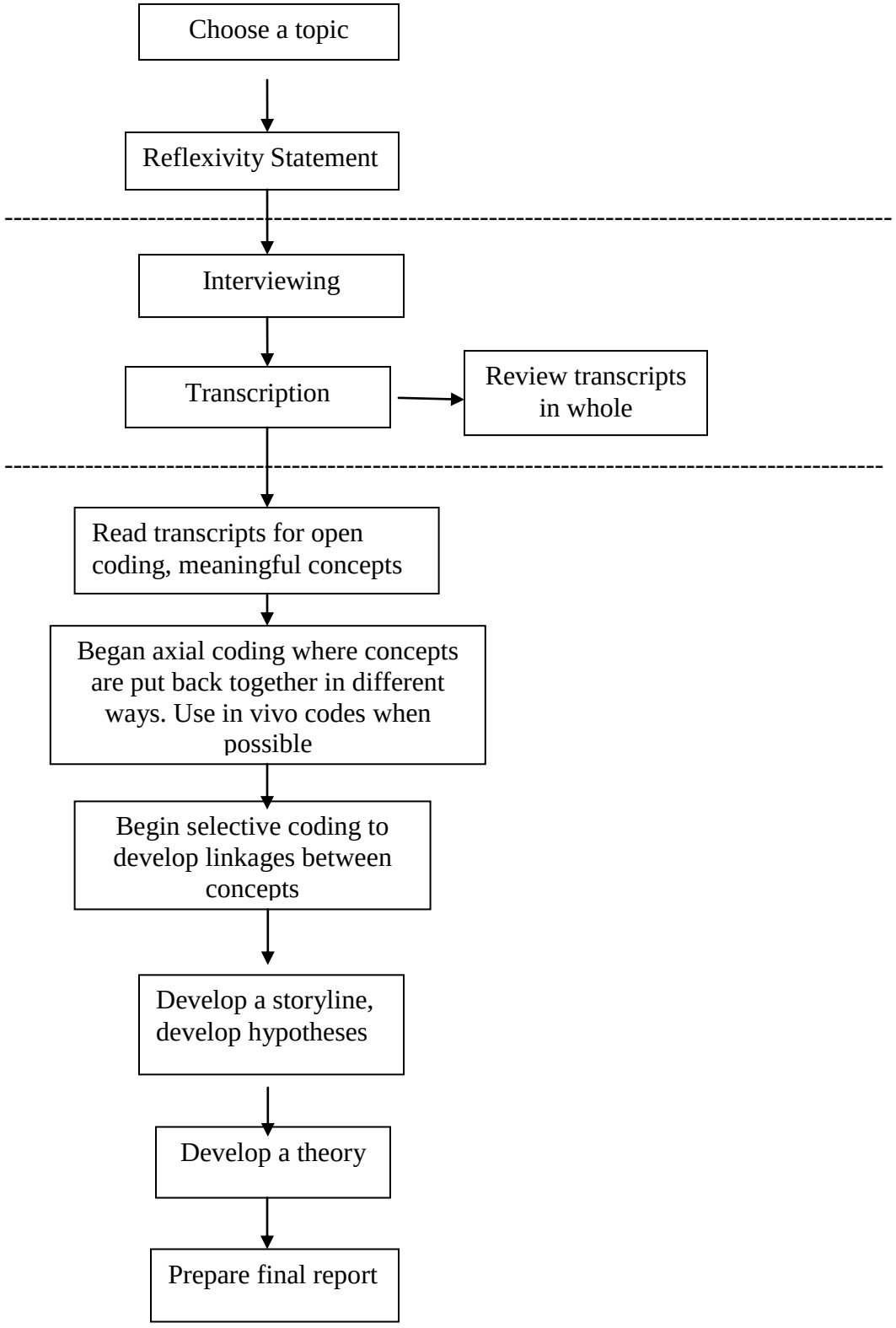
The procedures and canons of grounded theory (Strauss & Corbin, 1990) are:

1. Data collection and analysis are interrelated processes.
2. Concepts are the basic units of analysis.
3. Categories must be developed and related.
4. Sampling proceeds on theoretical grounds.
5. Analysis makes use of constant comparisons.
6. Patterns and variations must be accounted for.
7. Process must be built into theory.
8. Writing theoretical memos is an integral part of doing grounded theory.
9. Hypotheses about relationships among categories should be developed and verified as much as possible.
10. Broader structural conditions must be analysed, however microscopic the research.

Role of the Researcher in Grounded Theory

To promote trustworthiness, it is essential to identify the role of the researcher within the context of the study. In qualitative research, the researcher participates in the

Figure 1. A Model for grounded theory research procedure.



research at every step in the research process. During the in-depth interview data collection process and analysis, the researcher plays a major role in collaborating with the participant to help her tell her story.

Theoretical Sensitivity

Theoretical sensitivity is a key concept in grounded theory research. Theoretical sensitivity refers to personal qualities of the researcher including (a) an attitude of having insight into the data collection and analysis, (b) having the ability to give meaning to the data, (c) having the capacity to understand and (d) the capability to separate the pertinent from that which is not (Strauss & Corbin, 2009). Three factors "sensitize" the researcher to what is happening in the research. The first factor is a review of the literature. A review of the literature helps the researcher to be aware of obvious and less obvious conditions influencing the phenomenon allowing one to set priorities in interviewing, and coding concepts.

The second factor was professional experience. As a neonatal nurse practitioner, I attended hundreds of deliveries, vaginal and c-sections. I became interested in this issue because I am seeing more and more babies born by maternal request c-sections who have had complications.

The third factor was personal experience. Personal experiences, past and present, may affect the way a researcher collects and analyzes the data. As I examined the reasons that women choose elective c-section, I thought back to my own experiences. My unfortunate experience with a c-section and my pleasant experience with a vaginal birth increased my interest in this topic. By acknowledging these experiences and being

educated as a nurse to be nonjudgmental, I hoped to approach this study without bias or prejudice.

As the researcher, I identified several assumptions that may influence data analysis. I have identified and examined these assumptions so I can avoid bias in the analysis of the data. These assumptions are:

1. Pregnancy and birth are natural processes.
2. Women perceive that they make choices during pregnancy and delivery that are in the best interest for themselves and the baby.
3. Mothers want to share their birth stories as they perceived them.
4. The role of women's healthcare providers is to provide the pregnant woman with sufficient information on risks and benefits so the pregnant woman can make an informed decision.
5. In the patient-healthcare provider relationship, the baby exists as a third party, consideration of whose health must be paramount.

Sampling Procedures

In grounded theory, appropriate sampling is critical. Although a sampling guide was necessary to begin the study, sampling procedures were modified to provide depth of focus, consistency, and flexibility to pursue leads that emerged from initial data collection. I used theoretical sampling once initial interviews began, to fill in conceptual gaps.

Theoretical sampling is defined as "sampling on the basis of concepts that have proven theoretical relevance to the evolving theory" (Strauss & Corbin, 1990, p. 176). To have proven theoretical relevance, the concepts were repeatedly present or notably absent

when comparing each concept in different samples. Questions for participates changed based on the evolution of concepts. A wide range of data was desired to compare concepts and contrast concepts. This sampling increased the depth of focus.

Recruitment

To enroll participants, I put an advertisement in the Knoxville newspaper and in newspapers in a rural community adjacent to Knoxville, Sevier County. Flyers were posted in laundromats, beauty salons, public health departments, restaurants, day care centers and other business establishments in Knox and Sevier Counties. Flyers were also placed in pediatrician's and obstetrician's offices after permission was obtained. Despite these measures no women responding after seeing flyers or the ads in the newspaper (Appendix B). Therefore the snowball technique was used to recruit women for the study. Potential participants could contact me via telephone for a brief screening interview, according to the flyer. A description of the study and its purpose was given and any questions answered for the potential participant.

Inclusion/Exclusion Criteria

Inclusion criteria included the minimum age of the women as 18 years old, English-speaking, nonpregnant at the time of the interview, residing in East Tennessee, and having had a maternal request, primary (first) c-section within the previous two years. The telephone screening determined if the woman was eligible for the study. Sommer et al. (1993) found that pregnant adolescents were under significant stress, and had inadequate knowledge of children and appropriate parenting practices. Therefore, to be eligible for the study, the women must have been at least 18 years old. Women with acute illnesses at the time of delivery, users of illicit drugs, having serious mental illness,

post-partum depression or cognitively impaired women were excluded during the telephone screening. Exclusion criteria were determined by asking the potential participant if they had any of these conditions. If they answered in the affirmative, they were excluded from the study. Cognition was assessed during the telephone screening and by evaluating responses on the demographic questionnaire (Appendix C). In this study, no participant who responded was excluded. No participant shared a memory of an unethical event.

A small incentive, a gift card to a general merchandising store (Walmart) worth $20.00, was given to women who participated to compensate for their inconvenience. The goal for sample size was 15-20 women, although the final sample size was seven because saturation was achieved after five interviews and only seven women could be recruited for the study, despite recruitment efforts. However, the saturation of thematic categories governed the number of interviews needed to complete the analysis. Saturation occurred after the fifth interview and additional interviews were done to assure the saturation. Data saturation occurred when no further themes were forthcoming as noted in the interviews and early data analysis processes. The sampling strategy was changed during the study to include women with varying levels of education, socioeconomic status, and payor type for reimbursement for costs associated with the delivery.

Protection of Human Subjects

Recruitment of participants was begun after approval of Form B was received from the University of Tennessee's Institutional Review Board. Confidentiality was maintained throughout the research process. Confidentiality was maintained by allowing the participant to select a pseudonym to be attached to the transcript. No names were

written on the demographic questionnaire. All identifying information was removed during transcription of the interview. If the participant mentioned her healthcare provider's name, a random, single letter of the alphabet designated that person. Recordings were labeled with the participant's pseudonym and stored in a locked container inside my home. The recordings were kept until data analysis was completed and the dissertation defended. I personally transcribed all the interviews. Signed informed consents are to be maintained in a locked file in the faculty advisor's (Dr. Joanne Hall) office at the University of Tennessee for a period of three years. All who had access to the data were required to sign a Confidentiality Agreement Form (See Appendix D). This agreement was signed by all the members of the grounded theory working group who viewed and/or assisted in analysis of the data. De-identified transcripts of recordings were brought to the grounded theory working group to assist in interpretation and concept development. I used a password-protected computer for transcripts, field notes, coding notes and other documents.

The benefits for the participants included the opportunity to tell their birth stories and the opportunity to help further the knowledge on how women make the decision to have a c-section. The anticipated risks were minimal. No women became upset during their interview. No treated or untreated post-partum depression was detected among participants.

Ensuring Trustworthiness of the Data

Trustworthiness of the data is essential in any research study and no less in qualitative research. However, procedures to ensure trustworthiness are different from those used in quantitative research. Reproducibility means that a study can be replicated,

under similar circumstances and results should be reproduced and therefore credible. Although no social phenomenon can truly be replicated, it can be said that, using a similar sample, in a similar context, following the same rules for collecting and analyzing data, a researcher should be able to discover similar findings. The grounded theory study is only generalizable if the conditions that give rise to a specific set of action/interaction pertaining to the phenomenon and the resulting consequences are replicated (Corbin & Strauss, 2009).

The techniques I used included (a) a systematic and rigorous method of data collection and analysis using grounded theory, (b) face-to-face member-checking of interviews, (c) an audit trail including reflexive and coding memos, and (d) participant quotations to demonstrate that the theory is grounded in the data. Trustworthiness was also demonstrated by an adequate sample size with a heterogenous group of participants, using women with a range of ages, educational levels, payor status, and socioeconomic groups. I also reviewed analysis with the Grounded Theory Working Group at the University of Tennessee at Knoxville. This also promoted trustworthiness.

To avoid bias and promote credibility, I used substantive validation. This involves using the literature to support findings. Other methods to ensure trustworthiness included a self-reflection disclosure of assumptions about vaginal and c-section births based on my experience as an advanced practice nurse and my personal experiences with both a c-section and a vaginal delivery.

Reliability was achieved by using effective interviewing techniques and accurate transcribing. Reading the transcripts several times, word by word, line by line, and incident by incident helped to identify categories. Having other knowledgeable

professionals in the grounded theory working group read and code the transcripts, and then comparing results of coding promoted reliability. It was made clear in the study that the research questions would drive the data collection and analysis.

The value of the study and the applicability of the results to healthcare professionals who work with pregnant women are discussed in Chapter five. New questions for further study into this area and new knowledge gaps are also identified for in that chapter.

Data Collection Procedures

The primary source of data was face-to-face, in-depth interviews. No participants had written a journal. Most had baby books but did not bring them to the interview. Two women shared pictures of their child from their cell phone.

I conducted interviews in a private location. A time and place for the interview was selected based on mutual agreement with participant. I reduced the power differential phenomenon by dressing casually and attempted to establish rapport based on a mother-to-mother conversation. Prior to the interview, I explained the study and answered any questions. I reviewed the consent form with the participant and had her sign two copies (See Appendix E). One copy was given to the participant. Confidentiality issues were addressed in the consent form including (a) the interview process, (b) the fact that the interview would be recorded and a transcript made, (c) storage of recordings and transcripts, (d) risks and benefits, (e) compensation, (f) emergency medical treatment, (g) contact information, and (h) voluntary participation. I stored the recordings and transcripts in a locked filing cabinet in my home.

In grounded theory interviewing, the researcher seeks to understand the reality of an experience through the voice of the participant. Flexibility in the interview was important to allow discourse of emerging themes and allow the researcher to fill in conceptual gaps in the data.

I developed an interview guide to be used with each interview (see Table 1). I used the interview guide to record major points or significant phrases. This guide used a diachronic approach, starting at the beginning of the pregnancy and moving toward the end culminating in childbirth and the outcomes of the decision as perceived by the mother. The interview guide was used as a provisional tool. It was modified slightly as themes began to emerge.

Table 1. Interview Guide.

Interview Guide
How did you feel when you found out you were pregnant?
How did the pregnancy go for you?
You decided to have a c-section. Tell me about that decision.
Tell me what the birth means to you.
Where did you get the idea? Who influenced you? How did your doctor respond? What did your partner say? Did you see anything on TV or in the news that influenced you?
Tell me about your delivery. How did you feel during and after the delivery? Did you get to see the baby and nurse immediately after delivery? How is the child now? Do you have any pictures of the baby? Did you keep a journal or baby book?
How was your recovery? How was your baby's recovery? How did you feel about the delivery? Was there anything you would have changed about your delivery?
We've talked about ……. Is there anything else you'd like to tell me?

The guide facilitated information gathering, but did not interrupt the flow of information from the participant. An audio recorder was used to record the interviews. Using a recorder assured capture of the voice of the participant. Without recording, false starts, stray thoughts, parenthetic remarks, vividness of speech and content could be lost. I typed the transcript as soon as possible after the interviews to evaluate myself as an interviewer, control bias and begin the coding process while the interviews remained fresh in my mind.

When the interviews were over, I collected demographic information (Appendix C) including the mother's age, marital status, number of pregnancies, number of live births, educational level, socioeconomic status, race, and payor status. After the interview, I recorded my thoughts about the interview in a systematic method of reflective memoing. Field notes were written after each interview. I included such issues as (a) how the interview went as a whole, (b) issues of power dynamics, (c) if the environment was conductive to openness, (d) emotional tone, and (e) non-verbal gestures or body language that could not be captured by the audio-recording. I evaluated myself during the interview for mistakes such as misspoken words, unclear interview questions, and/or bias. I identified factors that needed to be addressed in subsequent interviews, the context, and ideas that emerged from the interview. Other information included (a) day-to-day activities, (b) methodological notes, (c) decision-making procedures, (d) personal notes about motivations, experiences with participants, and (e) possible revisions of interview questions. I organized these thoughts by recording the date, the pseudonym of the participant, and major themes that emerged. These reflective memos contained additional data that became part of the audit trail. An audit trail was composed of a series

of memos, code notes, field notes, member checking and other processes to establish validity and reliability and to form concept relationships that remained true to the data.

Data Analysis Procedures

In grounded theory research, it is important for the researcher to conduct the interview and then perform the data analysis. It is both an inductive and deductive process. Data analysis procedures are detailed, yet flexible. To get an overview of the interview, I initially read a copy of the transcribed interview in whole. During a second reading, I highlighted key words and phrases and made code notes in the margins as I read each transcript. As themes emerged, I made notes at the end of each transcript. During analysis, factors that affected the decision making process emerged. When evaluating data, Charmaz (2006) recommends attending to (a) actions and processes, as well as words, (b) delineating the context, scenes and situations of action carefully, (c) recording who did what, (d) determining why it happened and how it occurred, (e) focusing on specific words and phrases that seem to have particular meaning for the participant, (f) finding hidden assumptions of participants and (g) how they are revealed thoughts and affect actions.

Open Coding

Grounded theory provided a systematic method of identifying themes and grouping themes together to devise a theory. In open coding, segments of data from the in-depth interviews were selected for their ability to capture meaning from the participants. Open coding was done word-by-word, phrase-by-phrase, line-by-line and incident-by-incident. Coding defined what was happening in the data. Initial open coding was provisional. Each concept was reviewed and questions were asked, such as what are

the possible meanings of this concept from the least probable to the most probable. Words such as “never” or “always” were evaluated closely because they have significant meaning. The dimensions and properties of each concept were described. Segments of data describing a phenomenon were grouped together in categories. Categories were a group of concepts that pertained to the same phenomenon. I attached a label or name for the theme. It is helpful in understanding concepts to use in-vivo code names. These are codes that contain the actual words of participants. I initially used in-vivo names, and then progressed to more abstract names of the categories. The names of the categories were conceptual names that were more abstract than the initial coding. The name logically described the data it represented. Definitions, dimensions and properties of the concept were described and revised as meaningful units requiring broadening or narrowing. This became part of the memoing process.

Writing memos was important to analysis in grounded theory research. Each memo included the type of memo (field notes referring to observations made at each interview), code notes, and theoretical notes referring to pertinent code notes. Notes included the date, references to a specific code note or interview, name of the concept and thoughts about the concept including properties and dimensions. The memos were well organized so they could be found quickly to examine and establish relationships between concepts.

Axial Coding

The second stage of coding is called axial coding. Axial coding is comprised of a set of procedures in which the data was put back together in new ways making connections between categories and subcategories. Categories are linked together. This is

done by using a coding paradigm. The coding paradigm consists of the following concepts: antecedents, phenomenon, context, intervening conditions, action/interaction strategies and consequences (Strauss & Corbin, 1990). I developed a coding paradigm for each participant, then combined the seven coding paradigms.

Antecedents consisted of events, incidents or happenings (causal conditions) that lead to the development of a phenomenon. The phenomenon was the core category, or central idea. The context was a specific set of properties that pertained to a phenomenon. Intervening conditions are conditions that may influence the participant, in a positive (facilitating conditions) or negative (hindering conditions) way. Intervening conditions included such criteria as "time, space, culture, economic status, technological status, career, history and individual biography" (Strauss & Corbin, 1990, p. 103). Actions/interaction strategies were actions used to manage a phenomenon under a specific set of perceived conditions. It reflected how women carry out the consequences. The consequences occurred in response to the action/interaction strategies. Some open coding categories directly pertained to concepts in the paradigm model.

Axial coding centered on the specifics of a category in terms of the conditions that gave rise to it, the context in which it was embedded, the actional/interactional strategies by which it was carried out and the consequences of those strategies. Axial coding was complex, as I went back and forth between open coding and axial coding, identifying properties, dimensions and relationships between concepts.

Selective Coding

Selective coding involves putting categories and subcategories back together to show links that result in a theory. Patterns began to emerge from the concepts after axial

coding. Categories were grouped according to their properties. Deductive reasoning was used to connect the categories and identify patterns. Once the data was related at the property and dimensional level for each major category, a theory emerged (Strauss & Corbin, 1990). I went through each step of coding, often back and forth between the different levels of coding and back and forth between data.

Grounded Theory as a Transactional System

Corbin and Strauss (2009) describe grounded theory as a transactional system, a method of analysis that examines the interactive nature of events. Action and interaction are the key to grounded theory. Properties of a transactional system include the following:

1. Levels of conditions that are interactive and interrelated. These range in scope from the broadest (features of the world) to the most specific (the phenomenon under investigation).
2. Conditions may pertain to a phenomenon as a cause, as a context, or as intervening conditions.
3. Action/interaction is located within a range of conditions. Action/interaction takes place in related sequences, processual in nature.
4. Consequences arise from action/interaction. Some consequences may become conditions affecting the next action/interactional sequence.
5. Conditions may facilitate or hinder action/interactions.

The properties of a transactional system were shown graphically on a conditional matrix. According to Strauss and Corbin (1990), a conditional matrix helps the researcher be theoretically sensitive to the range of conditions that might affect (a) the phenomenon

of interest, (b) to the range of potential consequences that may result from action/interaction and (c) assists to relate conditions, actions/interactions and consequences of a phenomenon. Charmaz (2006) states, "a major purpose of the conditional/consequential matrix is to help researchers to think beyond micro social structures and immediate interactions to larger social conditions and consequences" (p. 188).

The conditional matrix is represented by a set of rings that go from the broadest (outer rings) conditions to the phenomenon (the inner most ring). The rings represent, from the outside inward, international level, national level, community level, organizational or institutional level, suborganizational or subinstitutional level, the group or individual level, interactional level, and finally the consequence or action pertaining to a phenomenon. The conditional matrix reflects how the core category affects the subject of each of the rings. The phenomenon is the focus of the conditional matrix. Interaction, temporality, and change are a part of the matrix. Strauss and Corbin (1990) recommended asking such questions as: "What is involved? What is its purpose? What form is it taking? What are the outcomes of each sequence, and how do outcomes of one sequence play into the next?" (p. 172). In the subsequent rings, the interaction/phenomenon is described as it occurs in the context of the organizational, national and international areas.

Writing a Story Line and Identifying a Theory

The researcher must write a story, a composite of all the data. A visual diagram of the theory was depicted. The story began with a few sentences describing the essence of the story drawn from the data. The story was told choosing a phenomenon, and relating it

to other categories. Next came writing a story line, moving from beyond description to conceptualization. The next step was selecting a core category, the central phenomenon.

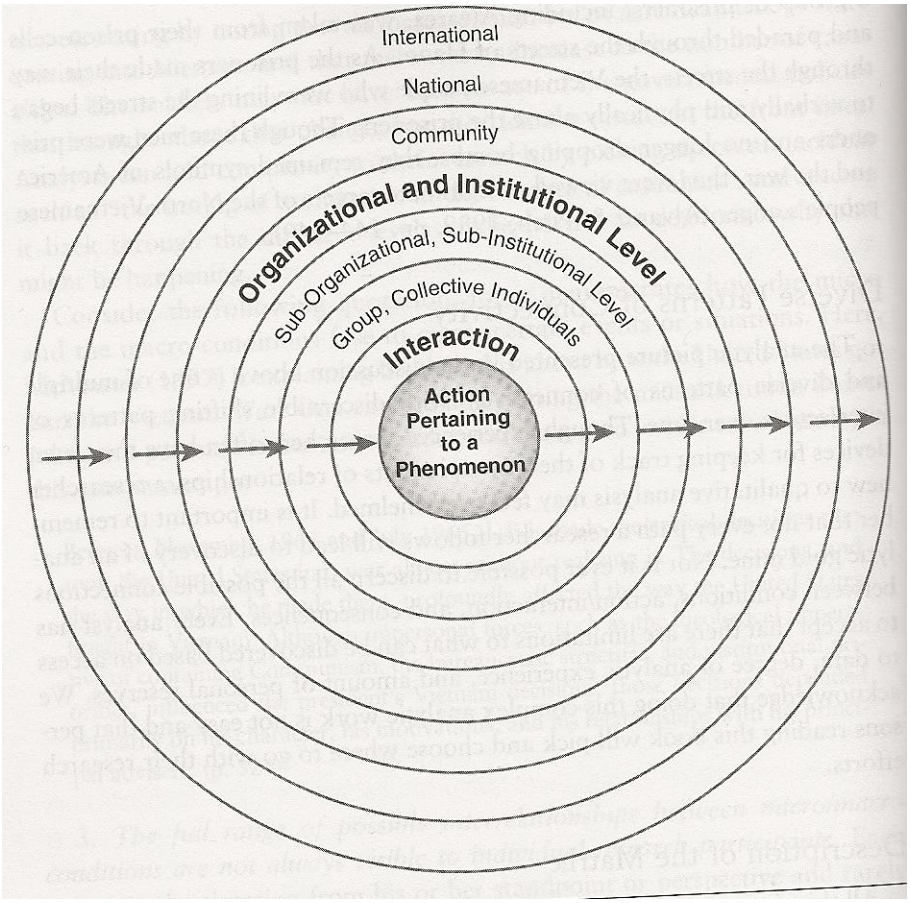


Figure 2. Condition Matrix (Strauss & Corbin, 1990)

A core category "must fit the story it represents" (Strauss & Corbin, 1990, p. 121). The core category was defined by its properties including its dimensions. Then subsidiary categories were related to the core category. The core category was broad enough to encompass the subsidiary categories. The paradigm model was used to relate and integrate the core and subsidiary categories until they fit the story line.

Process was important in this grounded theory research. It involved capturing movement and changed action/interaction within the analysis. Process was necessary to "give the reader a sense of the flow of events that occur with the passage of time"

(Strauss & Corbin, 1990, p. 147). Change also had properties and dimensions such as rate, occurrence, direction and ability to control. Change occurred in sets of conditions, intervening factors, or from consequences of other actions. Process was conceptualized in two ways, passing through stages or phases or as a nonprogressive movement, or action occurring in a state of flux (Strauss & Corbin, 1990).

"They [categories] are grouped along the dimensional ranges of their properties in accordance with discovered patterns. This grouping again is done by asking questions and making comparisons" (Strauss & Corbin, 1990, p. 132.). The categories were developed at the property and dimensional level for each major category. The story line became the beginnings of a theory. After the story line was clearly written, a hypothetical statement was developed. The statement was consistent with each participants' story. A substantive theory, according to Strauss and Corbin (1990) "evolves from the study of a phenomenon situated in one particular situational context" (p. 174). Validation of the theory occurred as the categories, properties, and dimensions were related in a given context. Validation of the theory was directly grounded in the data.

Although the data analysis was broken down in specific steps, it is a dynamic process with on-going action between coding and the steps described. Gaps were identified in the analysis and I had to return to the data and seek additional interview data to fill in those gaps.

Descriptive statistics such as frequency and percentages were used to evaluate demographic data. The demographic characterizes of participants were used as points of comparison among interviews.

Summary

This grounded theory study was designed to identify a theory of how women make the decision to deliver their babies by c-section without medical indications. Results from the study, shared with nurses and other health care providers, will allow healthcare providers to assist women in making the best decision for themselves as mothers and for their babies. Additionally, a clear understanding of the process of decision-making may provide healthcare providers and pregnant women with knowledge enough to reverse the trend of maternal request c-sections and revert back to vaginal childbirth.

IV. STUDY FINDINGS

The purpose of this study was to discover a theory about how women decide to deliver their infants by cesarean section in the absence of medical indications, instead of experiencing a trial of labor and expected vaginal delivery when it is medically appropriate. Chapter Four addresses the results of the study focusing on the core category, "doing what's best" and the relationships between categories and subcategories. This chapter includes a description of the participants, conceptual definitions, story line, a paradigm model, the substantive model, theory categories, the theory, exemplars, and a summary.

Description of Participants

Seven white women, ages 19 to 31 volunteered to participate in the study. The mean age was 25 years. Educationally, two women had a high school education or had completed their GED, while four women had some college or a four-year college degree. Four of the women were on TennCare and three had private health insurance. Four were single, never married and three were married. Additional demographic information is found in Table 2.

Table 2. Participant Characteristics

Characteristics	Mean	Range
Age in years	25	19-31
Income in dollars	39,286	<10,000 to 89,000
# of pregnancies	2	1-4
# of children born	2	1-2

The Story Line

A story is a composite of all the data. The story began with a few sentences describing the essence of the story drawn from the data. The story was told by choosing a phenomenon, and relating it to other categories. The story line was written moving from beyond description to conceptualization. The following is the story of "doing what's best."

The two reasons that women chose to have an elective c-section were because they had fears about a vaginal birth and because they perceived that a c-section was an easier birth. Some women perceived that a c-section is an easier birth because they did not have to submit themselves to the pain and anxiety associated with labor and vaginal delivery.

Some pregnant women had fears unique to pregnancy and childbirth; these fears involved labor and probably a vaginal birth. Such women were anxious because they did not know what to expect during labor and delivery concerning the length of labor, the strength of contractions, and the baby's emergence from the birth canal. They were afraid of losing control and embarrassing themselves. They were anxious because they feared that labor would not start spontaneously and an induction would be necessary using oxytocin to stimulate strong contractions, thereby increasing the pain of contractions. Women asked themselves: Will I be able to give birth by the vaginal route at all or will I require an emergency c-section? These women also had fears of the pain of childbirth, the possibility of damaging their internal pelvic organs, and the possibility of causing damage to the infant. Some women expected the worst complications to happen.

The women were concerned about their health as well as the health of the baby. They obtained early prenatal care, followed instructions by their health care provider, ate a healthy diet, had routine ultrasounds to follow the baby's growth and complied with testing to assure the health of the baby. They were healthy women who believed that complying with prenatal care would result in a good outcome; a healthy mother and a healthy baby. An uneventful, normal-progressing pregnancy provided a contextual background against which the pregnant women made these decisions about the delivery of their babies.

To relieve anxiety and fears and strive toward a good outcome, many women chose to have an elective, primary c-section even though they had no medical indications for a c-section. They may or may not have understood the risks of c-sections. But none the less, they made this decision for themselves. They considered this choice to be "doing what's best" for themselves and their babies.

Before confirming this decision, these women used action/interaction strategies such as gathering information about c-sections and evaluating the pros and cons of the procedure. They talked to friends and family. They talked to their health care providers, usually physicians. They learned about c-sections and vaginal deliveries from childbirth classes and by watching reality television programs about having babies. They learned from watching these programs that having a c-section was the easier way to give birth, which is actually not the case from a risk viewpoint and/or in considering that there would be surgical pain from the c-section.

There were a number of factors that facilitated or hindered the decision-making process by these women. Some of these women decided on a c-section based on horror

stories of vaginal birth told by friends and family members. They heard tales of long, painful labors, perineal tearing producing soreness, and being unable to actually deliver vaginally and then requiring a c-section. On a positive note, they realized the convenience of having a scheduled c-section so they had time to adequately prepare for the birth of their baby. They were frequently able to choose their own date, which had special meaning for them. These gave the father and mother a period of time to block off for the preparation, the delivery and recovery before going back to work. It also allowed out-of-town family members to be present at the delivery because they knew exactly when it would occur. The ability to schedule a c-section seemed to be especially attractive to these women. The decision of these women was supported by their doctors, friends and families. Occasionally, family members tried to discourage women from having a c-section. Nevertheless, these women made it clear to their doctors, friends and families that it was their decision alone and that they had decided on having a c-section.

These women saw the consequence of the decision to have an elective c-section as having a good outcome. Making this decision and selecting the date was vital to these women for their perceived ideal delivery. Control over the decision of having a c-section and the ability to choose the date, provided them with a great deal of satisfaction and happiness. They believed that having a c-section was just as special as a vaginal delivery and they did not "miss out" on a unique and special experience. They knew exactly what was going to happen and this relieved their fears and anxiety. They relived the experience of an elective c-section with happiness that they had made the best decision for them and their babies.

The Paradigm Model and Theory

The paradigm model is a tool (Strauss & Corbin, 1990) used to relate the categories and subcategories explaining the theory. The paradigm model consists of causal conditions → phenomenon → context → intervening conditions → action/interaction strategies → consequences. This model allows the researcher to think systematically and relate the data in complex ways (Strauss & Corbin, 1990). The model was developed according to the axial coding performed, determining categories and asking questions about the categories to discover relationships between categories. The theory as it conforms to the paradigm model is shown in Figure 3.

Conceptual Definitions

The definitions of categories and subcategories were essential for understanding the relationships between categories so that the theory makes sense and is expressed appropriately. The conceptual definitions of the theory of "Doing What's Best" are as follows:

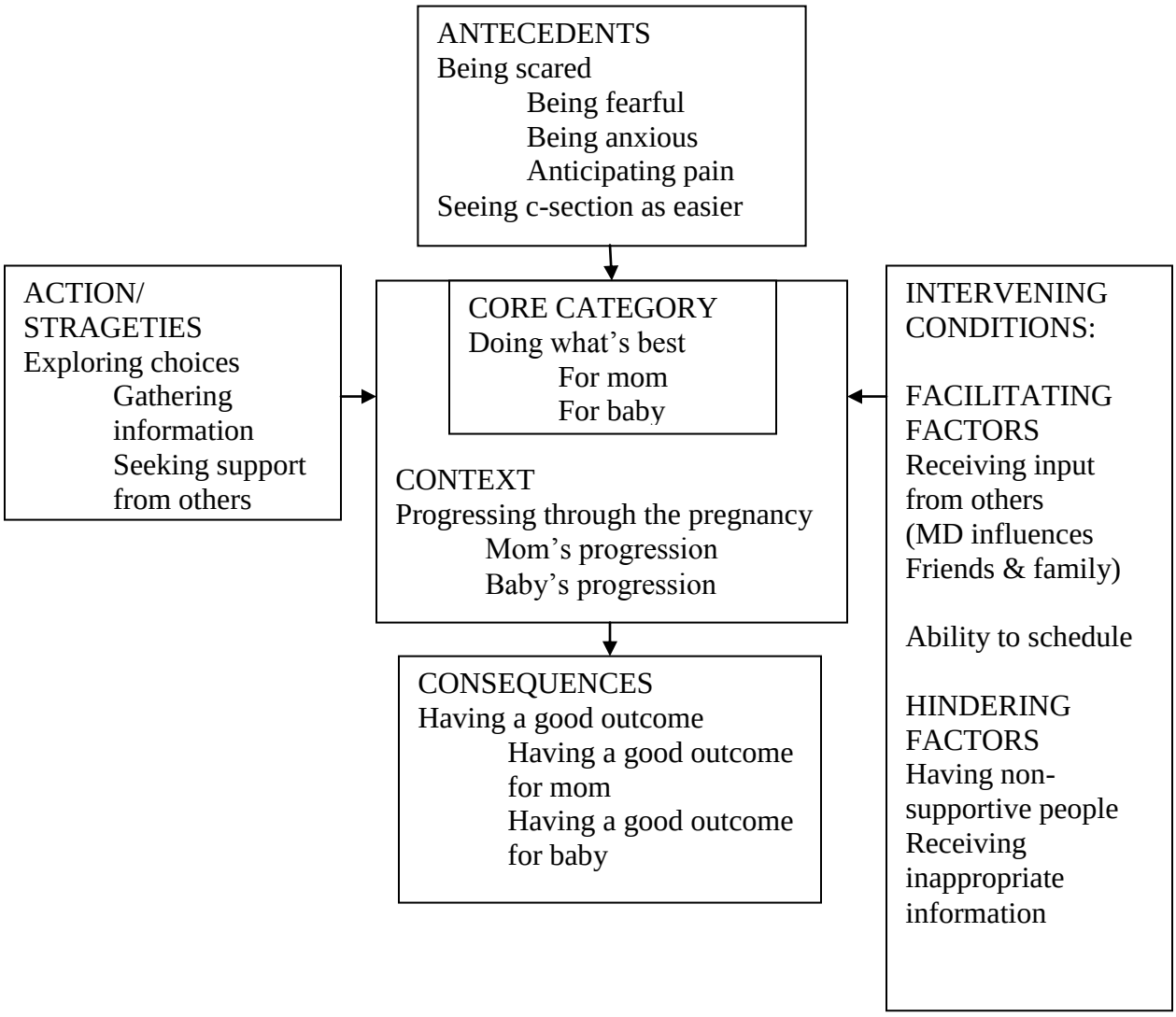
Being scared---Antecedent category. To be afraid of real or perceived danger causing fear, anxiety and pain in pregnant women resulting in making decisions to avoid fear, anxiety and pain.

Being fearful---Antecedent subcategory. To be afraid of real or perceived danger.

Being anxious---Antecedent subcategory. A worry or uneasiness about what may happen in the future.

Anticipating pain---Antecedent subcategory. A fear of especially uncomfortable labor contractions and vaginal birth that is expected to occur.

Figure 3. The theory of "Doing What's Best"



Seeing a c-section as being easier---Antecedent category. A pregnant woman's perception that having a cesarean birth is less stressful and less painful than a vaginal delivery.Doing what's best---Core category. Action taken by a pregnant woman to protect her self and her baby and strive toward the ideal perceived outcome for both.

Doing what's best for the mother---Core subcategory. Actions taken by the pregnant women to protect herself and strive toward the ideal perceived outcome for her.

Doing what's best for the baby---Core subcategory. Actions taken by the pregnant women to protect the fetus and strive toward the ideal perceived outcome for her baby.

Progressing through the pregnancy---Context category. Moving through the phases of bearing a child from the beginning of the pregnancy culminating in the birth of a baby.

Mother's progress---Context subcategory. Actions taken by the pregnant woman to assure her optimal health and well-being.

Baby's progress---Context subcategory. Actions taken by the pregnant woman to assure the health and well-being of her baby.

Receiving input from others---Intervening conditions, facilitating factors, subcategory. Asking friends, family, and health care providers for their opinions, views, and support for the pregnant woman's consideration in making the decision.

Physician influences---Facilitating factors subcategory. Seeking input specifically from an obstetrician on the decision to have an elective c-section.

Family and friends---Facilitating factor subcategory. People known to the pregnant woman who have a specific relationship with her, whose opinions, views and desires the woman elicits when making important decisions, such as the mode of delivery.

Ability to schedule---Facilitating factor category. A decision made for the date and approximate time of the birth, mutually agreed upon by the pregnant woman and her health care providers.

Non-supportive people---Intervening conditions, hindering factors, subcategory. People known by the pregnant woman, such as friends, family and health care providers who voice negative opinions, and views on the woman's choice of mode of delivery.

Inappropriate medical information---Intervening conditions, hindering factors subcategory. Verbal or written guidance that consists of viewpoints, and opinions that may be inaccurate or false.

Exploring choices---Action/interaction strategies category. Action taken by the pregnant woman to gather information from many sources to assist her in making the decision regarding the mode of delivery.

Gathering information---Action/interaction strategies subcategory. Action or strategies taken by the pregnant woman to assemble views, and opinions regarding the mode of delivery, using sources such as books, pamphlets, newspapers, magazine articles, television and the Internet.

Seeking support---Action/interaction strategies subcategory. An action by a pregnant woman to gain positive statements and actions about her chosen mode of delivery, from people with whom she has a relationship, including family, friends, and health care providers.

Having a good outcome---Consequences category. From the woman's viewpoint, achieving perceived positive results of the decision to have an elective c-section.

Having a good outcome for the mother---Consequences subcategory. Achieving perceived positive results of the pregnant woman's decision to have an elective c-section for herself, resulting in good health and no significant complications of the c-section.

Having a good outcome for the baby---Consequences subcategory. Achieving perceived positive results of the pregnant woman's decision to have an elective c-section for the baby, resulting in good health and no significant complications of the c-section.

Theory Categories with Exemplars

Antecedents: Being Scared

The theory of "doing what's best" began with the antecedents. This section identifies the antecedents and discusses the category and subcategories that constituted them. The first category includes the antecedent, "being scared." This category related to the reason the women chose a c-section. "Being scared" appeared in every interview. The subcategories explained why "being scared" was important and included being fearful, being anxious, and anticipating pain. These concepts were closely related to each other.

Being fearful: Many different reasons caused mothers to be fearful. Mothers described: (a) fear of losing emotional control, (b) fear of the unknown, (c) fearing pain of labor contractions, (d) fear of the possible trauma caused by the use of forceps and vacuum extraction, and (e) fear of damage to the pelvic organs. Bobby described her fear as being related to labor contractions:

> My sister had back labor. Was in labor for 16 hours. The baby was big, so her bottom was really sore. I was scared of being in labor that long, especially back labor. The closer I got to the delivery, the more scared I got.

Bobby expressed both being fearful and anticipating pain. These two concepts were closely related and it was sometimes difficult to distinguish between the two concept subcategories.

Regina said, “It’s probably not a great answer, but, what I think was the biggest reason was that I did ask for a c-section was just the anxiety and fear and you always hear about the worst case things.” Lisa said, “I did not want a forceps or vacuum applied to my baby’s head. I just had that phobia and I did not want to go through that…I didn’t want my baby pulled out of me.” Ashley, an obstetrical nurse, related:

> You see all of the worse things in labor and delivery, the things that can happen, and I guess you’re just scared and you think if it’s a long process, and if I’m sitting there watching every contraction, you know the first decel [drop in the fetal heart rate] and I’m gonna be panicking.

Ashley also said, “Well, I’m allergic to vaginal deliveries.” Kathy admitted, “I was kind of scared about a vaginal birth…[I was scared] of the labor pain, just the whole process of him coming out…The pain scared me pretty bad. You know, something big coming out down there. It scared me.”

Being anxious: Mothers voiced high levels of anxiety when faced with possible labor and a vaginal birth. Similar to being fearful, the sources of anxiety included: (a) possible loss of emotional control during labor, (b) possible embarrassment, (c) concern that the baby would not emerge from the birth canal and the mothers would need an emergency c-section. Ashley expressed potential anxiety saying that she was afraid that her “water’s gonna break, walking in Walmart” and she would be embarrassed. In general, women were concerned they would embarrass themselves during labor and vaginal delivery by screaming, using curse words and being out of control physically during labor.

Women were also concerned about harming the infant during labor and vaginal delivery. The potential dangers of the use of forceps and vacuum extraction were also discussed. Kathy said:

> Didn't want them to have to pull him out, if he happened to be a much bigger baby. I didn't want them to have to break his collar bone. I've heard stories about that. When he comes out, breaking the bone, 'cause the shoulders were so big.

The suction machine for them to pull him out, kind of worried me about his head. Regina was concerned about "just the pushing, the laboring, how long am I going to labor." Many mothers were afraid of the unknown of labor and vaginal delivery. Regina watched a video in childbirth classes, which increased her anxiety.

> I asked for the c-section, I think in the video they showed, you know, heard the screaming and you, um, you see all the different kinds of births, the tub, and whatever. And it just, the anxiety of it all. Being scared I guess.

Anticipating pain: The anticipation of pain produced by labor contractions and vaginal delivery was a common theme. As some of the mothers were primiparas, they did not know how labor contractions felt and feared the possible pain. Emergence of the body of the infant from the birth canal was seen to be nearly impossible and would cause significant pain. One mother quoted "the pain scared me pretty bad. You know, something big coming out down there. It scared me." Bobby said, "I don't like pain and I don't like needles." Kathy said, "I have, you know, a low tolerance to pain. I mean you know I'm pretty much a wuss." Violet stated she was "Scared and mad… My first delivery was rough. My epidural didn't work and I had to give birth the natural way. I, guess I didn't want to go through that [pain] again."

Antecedents: Seeing a C-section as Being Easier

Another antecedent category was seeing a c-section as being easier. Mothers verbalized that c-sections were more predictable, and less painful; the idea of a c-section produced less fear of the unknown, and a feeling they would be more in control. The pain of having a surgical incision was perceived to be better tolerated than the pain of vaginal birth and possible tearing of the perineum requiring repair by episiotomy. Bobby stated:

> He [her doctor] told me how easy it was, and that we, um could set the date and time. He said with labor, you never know when it will start and they might have to start my labor with medicine. That didn't sound so good. The c-section started sounding better and better.

Dawn said, "C-sections are much easier than going through [labor]….You don't have to worry about the pain. Going in there, they're gonna shoot you up. They're gonna get it done." Regina said "The c-section it's planned and you go in, it was great." Kathy said, "The whole process of giving birth period whether it was a c-section or a vaginal birth scared me to death. But overall, the c-section seemed less painful and less scary…it seemed like, the best thing for me."

Phenomenon: Doing what's best

The core category or phenomenon that emerged from the data was "doing what's best." Almost all mothers stated that the c-section was the best thing for themselves and their baby. This included two subcategories "doing what's best for mother" and "doing what's best for baby." The property of the subcategory was "not missing out on the childbirth experience."

Doing what's best for the mother: Mothers verbalized that the c-section was the best thing for them. They felt in control and thought that a c-section was the safest option in their situation. They discussed the fact that they did not "miss out" on the experience of birthing via a vaginal birth. These factors combined to promote happiness with their choice of a c-section.

According to one participant, "It was the best thing in the whole world." Kathy said, "Both of us agreed. It was the safest thing for me and the baby." She also said, "I did research on vaginal birth too. But it seemed better for me to have a c-section. And I just said again, it's [c-section] the safest thing for me and the baby…So, it was just the best thing." Regina related, "He [husband] felt like it [c-section] was better for me. He didn't want to see me laying there hurting."

"Not missing out" was a property of "doing what's best." Mothers felt strongly that a c-section birth would not deny them the experience of giving birth and that a c-section was different, but just as meaningful as a vaginal birth. Ashley said, "I don't think he [father of baby] missed out on anything. I don't feel like I missed out on anything." Lisa said, "I didn't feel like I would miss out on the pushing." Lisa also said,

> I don't feel like he [husband] missed out that we didn't push for two hours or we had a cesarean. Anyway, the same result was a baby. So I don't feel like I missed out on anything. I feel like I rather have a sore belly any day over a sore bottom.

Regina made a similar observation:

> You know delivery and birth, it's a special thing, a special bond, you know, a lot of people had said you know you're missing the part of it, missing that part of pushing and bringing that child into the world, you know, on your own. But to me

> it was just as special. It was the birth of my child….I don't feel like I missed anything.

Regina also said, "I feel like I got the same experience you know, obviously, by a different means."

Doing what's best for baby: This subcategory related back to being scared. Several participants were afraid for the health of their baby if they went through a vaginal delivery. Mothers were concerned about the possible trauma to the baby during labor and a vaginal delivery. To these mothers a c-section was a less traumatic delivery for the baby. Therefore, having a c-section was doing what's best for the baby.

Lisa said, "I wanted to do everything I could to make sure, to make sure we had a good outcome." She also said, "It was just the best thing in the world, hearing your baby cry."

Bobby said:

> He [the doctor] told me how easy it was and that we, um could set the date and time. He said that with labor, you never know when it will start and they might have to start my labor with medicine. That didn't sound so good. The c-section starting sounding better and better. It just sounded like the right thing to do for my baby and me. So, that's what I decided.

She also said:

> I have a friend who didn't get any prenatal care, um, and her baby was born early and had to stay in the hospital four extra weeks. I didn't want that for my baby. I wanted to do the best thing for my baby.

Context: Progressing Through the Pregnancy

Progressing through the pregnancy encompassed prenatal care for the women from finding out they were pregnant to the time of delivery. This provided the context for the entire paradigm model. Prenatal care was provided by obstetricians mostly with an occasional visit with an obstetrical/gynecologic nurse practitioner. Subcategories included "baby progressing" and "mother progressing."

Baby progressing: "Baby progressing" is a subcategory of progression through the pregnancy. In general, "baby progressing" referred to the fetal growth, development, and on-going concerns about the health of the fetus. Lisa spoke about these issues:

> Watching the baby grow. It was fun going to the doctor. I loved the ultrasounds all the time. Worried about, that something was wrong with the baby, paranoia. Wanted to get all the testing, the quad screen. We could do everything to make sure everything was okay with her…. Make sure she was growing properly. I wanted to do everything I could to make sure, to make sure we had a good outcome.

Bobby describe prenatal care as "I wanted to do the best thing for my baby."

Mother's progressing: Mother's progressing was a subcategory of progression through the pregnancy. The importance of good prenatal care was described by most mothers. They wanted to assure they could carry and delivery the baby with their own health in mind. Bobby said:

> I knew it was important to get good prenatal care, so I picked a good doctor….I went to my appointments 'cause I wanted my baby to be healthy. I have a friend

> who didn't get any prenatal care, um, and her baby was born early and had to stay in the hospital four extra weeks. I didn't want that for my baby. I wanted to do the best thing for my baby. So ah, I went to my appointments and got on TennCare and WIC."

Lisa said, "Wanted to eat right. Make sure my diet was good." Dawn said, "I had a good pregnancy….I had the perfect pregnancy." Lisa summarized what "progressing through the pregnancy meant to her, "healthy mama, healthy baby."

Intervening Condition Facilitating: Receiving Input from Others

Intervening conditions included facilitating and hindering conditions. The facilitating categories were "receiving input from others," and the "ability to schedule."" "Receiving input from others" included input from health care providers, family, friends and written materials given to the mother for informational purposes.

Receiving input from family and friends: This was a facilitating subcategory of "receiving input from others." The opinions and experiences of family and friends played a large role in the mother's decision. Kathy tells, "Well, I talked it over with my husband. We just thought it was the best thing for me…He didn't try to sway me one way or another." The childbirth experiences of friends and family were also important in the women's decisions. Ashley said, "My sister, she had a baby not long after me and she had a vaginal delivery. She had a really big tear and really bad recovery afterwards. Then, she had issues with bleeding. So it was a big mess for her." These negative childbirth experiences of friends and family influenced mothers and reinforced their confidence in their choice of a c-section. Ashley says,

> My mother had a c-section with me and she had my older sister, a vaginal delivery with her. It was a really bad experience for her and although she dilated to ten [centimeters], she wasn't thinning out. And I heard all the horror stories. How they had to go in with forceps.

Physician influences. "Physician influences" was a facilitating subcategory of "receiving input from others." Sources for the idea of having a c-section were mostly the mother. However, one was the idea and that of the physician. However, even if it was the mother's initial idea, there was some positive physician influence.

Violet said, when asked where she got the idea to have a c-section, "My doctor. He thought, um, it was the best thing for me and I trusted him….My doctor was the biggest influence. He explained it all to me, So, I guess it was alright." Kathy says about her physician, "He was good with it [the decision]. He didn't encourage it and he didn't dissuade me. You know, he was just real positive that I knew what I wanted….He told me what to expect." Ashley said, "They kept telling me the baby was gonna be about 10 pounds. So Dr. K said, maybe it's probably a good idea that you did choose a c-section. I kept measuring really big but I had lots of fluid [amniotic]." Ashley added, "He [the physician] even told me before he said yeah, that's what I would do. That's [c-section] the way to go. You know he said that, I guess it's more convenient." Lisa said, "I was checked and told I had a real prominent tail bone, told it would probably be a tight fit." Regina relates:

> I basically said can I have a c-section? And at first, I think he [the physician] was a little bit shocked that I asked, but his response was the baby was a little bit big

> anyway…I'm a very short girl, and he said that a lot of times. It's hard to deliver anyway when you're short.

Intervening Conditions Facilitating: Ability to Schedule

This was a facilitating category in intervening factors. All women stated the importance of the ability to schedule. They picked a day for the delivery and wanted to deliver on that particular day. The ability to schedule related to the mothers feeling in control. Lisa said:

> Knowing when everything is going to happen. With the c-section, it's planned, and you go in, um, it was great. They told me what time to be there. I got my IV and an hour and a half later, the baby was here and we're all fine.

Kathy put it in terms of family convenience:

> I have a lot of family that lives out of town. You know, I wanted them to be all around. It was easier to us just to sit down and schedule it. Plus, you know, my husband works, and he was able to take a week off and he was able to take a maternity leave. It helps a lot, figuring out when he was gonna do the c-section as far as his schedule and my family's schedule.

Dawn related personal reasons for choosing a particular date:

> My due date was set and I wanted him on that date. So, the other doctor, he was there, said we could schedule a c-section. That's what we did….It was my aunt's birthday and she had passed away from terminal cancer. So we wanted him on that date.

Intervening Conditions Hindering: Non-supportive People

There are two hindering factors: "non-supportive people" and "receiving inappropriate medical information." "Non-supportive people" could be a major problem for pregnant women. However, in this study, only one mother experienced it. Nevertheless, it did not dissuade that mother from having an elective c-section.

One mother voiced that she had friends, family and health care providers who were not initially supportive. Ashley relates:

> Everybody said, I can't believe you would do that. It's not, it's not natural. Well it's not gonna change the fact that you're gonna be the mother of a baby. It was everybody. Why would you want to do that? The biggest reason was why would you want to have a scar from your stomach?

When she asked if she had a fight from the staff, she elaborated:

> It was everybody [staff of hospital and family]. Why would you want to do that? The biggest reason was why would you want to have a scar from your stomach? That was no big deal for me. You knew I grew up, my mom was proud of hers [c-section scar]. And showed me that's where I came from, all the time. So, it was like, it's just a badge of honor. It wasn't like it was this horrible thing.

Intervening Conditions Hindering: Inappropriate Information

Another mother received a pamphlet that she considered "too medical" to understand. Medical information written for patients should be at an 5th grade level so the majority of people would be able to understand it. Inappropriate medical information may confuse patients and result in the patient having few or no options for treatment. Some women obtained their information from television reality programs. Pregnant women watching

these programs, which are often dramatized, may believe they can have a similar experience, whether it be good or bad.

Dawn received a pamphlet from her doctor on c-sections. She discussed her difficulties with it:

> They gave me a pamphlet on my last doctor's visit. I looked over it. Kind of too medical for me….Because with this, they're gonna cut you open, take out the baby and that's it. I don't know the tools or anything they're using.

Therefore, she discarded it. Dawn enjoyed watching the baby reality television programs. When asked if she watched them, she replied:

> Yes. Day and night, 24/7. On and on. I'd watch the reruns. I know what happens there…Because it looks like, um, c-sections are much easier than going through…You don't have to worry about the pain. Going in there, they're gonna shoot you up. They're gonna get it done.

Bobby said, "I watched the baby shows on TV. Loved the baby shows. They made me want my own baby. So now, I have a little boy."

Action/interaction Strategies: Exploring Choices

Action/interaction strategies were a major category, named "exploring choices," and described what mothers did to actually make the decision to have an elective c-section. The two subcategories were "gathering information" and "seeking support from others."

Gathering information: Gathering information about the c-section versus vaginal delivery was important to mothers so they would know what to expect with a c-section. Kathy said, "I was reading a book, ah, What to Expect When You're Expecting. I just, you

know. I looked it up on the internet and got some information." Kathy continued, "I talked to my family members, and read up a little on the internet, and then the book I was reading. I just tried to do research on it." Several mothers went to childbirth classes to seek information about what to expect regarding the childbirth experience. Regina said she "watched a few videos, heard the screaming and things like that. Basically, that sealed the deal that day. The next doctor's appointment I asked for the c-section." Bobby said:

> I did go to prenatal classes so I could learn about the baby. My baby's daddy went with me. So, that was good. At least we got better prepared for the delivery….They, ah, showed us a video of birth and a c-section.

Kathy said that childbirth classes "just made me more knowledgable and affirmed the decision that you make. They told me a little bit of what more was to happen. The inner more workings of the whole c-section."

Seeking support: Support for the women in the study came from family, especially their partners and from friends. Family and friends often shared their experiences with childbirth in an attempt to support the pregnant woman's decision about delivery. Friends and family were very important to these women. They not only provided emotional support but also helped the mother and baby after discharge.

Regina said, my husband "was fine with it. He's very laid back and supportive. The less pain I have to go through, he felt like was the better for me. He didn't want to see me laying there hurting." Lisa said, "I have a good friend, Eve. I talked to Eve about it [the decision to have a c-section]. And um, she understood my fears, and um, my

hesitation from working here [obstetrical unit]." Kathy said "I had my husband, he was there to help calm me and see me though and make sure everything was ok."

Consequence: Having a good outcome

The desired consequences were having good outcomes for mother and baby. Mothers defined a good outcome as having a healthy baby and themselves with no complications during the pregnancy and delivery. Having a good outcome signified that the women had made the appropriate decision regarding the mode of delivery. There are two subcategories, "for mother," and "for baby." "Happiness is a property of "having a good outcome."

Good for mother: "Good for mother" indicated that the mother was healthy and had no complications associated with the pregnancy and delivery. It also demonstrated a positive emotional experience for the mother. Having a positive emotional experience seemed more important than the physical aspects of delivery. Ashley happily described her c-section "And you're awake for it. So it's not like you're missing out on anything. I didn't mind having a scar. It's a badge of honor." Regina said,

> You know delivery and birth, it's a special thing, a special bond. You know, a lot of people had said, you know you're missing the part of it, missing that part of pushing and bring that child into the world, you know, on your own. But to me, it was just as special.

Bobby said "c-sections are good for mamas and babies." Kathy also stated,

> Everything seemed as we had planned it, as far as you know nothing unexpected. No health scares or baby scares or you know. I mean the doctor was good. The

> nurses were excellent. The hospital facilities were nice. I mean I feel like I got the best treatment they could give me.

Ashley commented, "You go in and have it done. It's quick. You have it done. You're not sitting there in labor. Are you gonna dilate. You know what's gonna happen in an hour." Regina reported that a special bond existed between her and her baby because of the positive nature of her childbirth experience.

Knowing what was going to happen was important for the women. "You know nothing unexpected. No health scares or baby scares," stated Kathy. Women spoke of the happiness the childbirth experience had for them. Lisa said, "With the experience I had, (recovery was) a piece of cake." Lisa also said, "I know that it may be not the way God intended all babies to be born. But it is a way. And, um it was the perfect way for me." Bobby summarized the childbirth experience in a unique way. "Didn't have no painful contractions. Didn't have a sore bottom. Didn't have no baby with a conehead."

Good for baby: "Good for baby" related to the health (lack of trauma) and appearance of the baby. "My baby had a pretty round head," several mothers reported revealing that the c-section was also best for the baby. The bonding experience with the infant also contributed to being "good for baby." Ashley said "I did nurse and it was successful. I feel like I've been closer. I'm close to my first one, don't get me wrong. But I feel, right off the bat, I felt closer, being a mom." When asked what a good birth meant to her, Lisa said, "Healthy mama, healthy baby. Having everything be fine at the end. Baby's crying, um, pink, alert, um good health….I just thought it would be less trauma to the baby….Hearing my baby crying was is just the best thing in the world."

"Happiness" was also a property of the category "having a good outcome." Happiness is a strong, positive human emotion. This emotion was verbalized in every interview. Kathy said, "I'm totally happy with everything that went on. Like I said, I couldn't ask for better." Lisa related, "I enjoyed the whole experience….It's just something you want to do again and again and again….It was a wonderful experience." Bobby said, "I got to hear him cry. It made me cry, I was so happy." Regina said "I didn't want to be so stressed out [by labor] by the time the baby got here, not be able to enjoy it." Bobby said, "But I got to hear him cry. It made me cry, I was so happy….He had the most beautiful little face."

Summary

All of the categories and subcategories occurred within the context of "progressing through the pregnancy." All of the categories fed into the core category of "doing what's best" for mother and baby. Many of the quotations from mothers could be put into other categories and this was especially true for the core category of "doing what's best." The positive consequences of "having a good outcome" may lead mothers to choose an elective c-section in subsequent pregnancies. Mothers who chose c-sections for subsequent deliveries best illustrated this relationship. Instead of having a vaginal birth after a c-section (VBAC) they choose to have another c-section because of the good outcome of the first c-section.

Process was important in grounded theory research. It involved capturing movement and changing action/interaction within the analysis. The process of how a woman made the decision to have an elective c-section consists of progressing through the major categories. Being scared/seeing c-section as easier → Doing what's best →

Progressing through the pregnancy → Seeking input from others/ability to schedule →Exploring choices →Having a good outcome.

These categories and the relationships between them gave rise to an emergent theory. Women who experienced (a) high levels of anxiety and fears regarding vaginal birth (b) had supportive health care providers, friends and family (c) gathered information on childbirth choices (d) exerted control over their delivery and (e) often choose to have elective, primary c-sections were happier with their childbirth experience compared to the perceived experience of a vaginal birth. These women desired a high level of control and wanted multiple choices when it related to their childbirth experience.

Subsidiary Questions Answered

When asked about reimbursement for an elective c-sections, both Kathy and Bobby, who had TennCare said that they owed no additional fees for the doctor or hospital. Lisa, who had private insurance, said her insurance paid for all expenses.

It is the responsibility of the physician to explain the risks and benefits of different options for delivery. When mothers were asked if they were told the risks of the c-section for baby and mother, Lisa, Kathy and Bobby said they were not. Ashley said

> And then also in labor and delivery I see c-sections done and you know I've never seen anything go bad in a c-section. I'm sure there is always a risk. I know that. It's always been, kind of, to me it was never a big surgery, even though it really is.

Substantive Model

A substantive theory, according to Strauss and Corbin (1990) "evolves from the study of a phenomenon situated in one particular situational context" (p. 174). The

storyline was translated into a substantive model and a theory emerged, "Having an elective c-section: Doing what's best."

The Theory of Having an Elective C-section: Doing What's Best

Some women experienced high levels of anxiety, fears, and anticipate pain related to potential vaginal birth. These fears included potential tearing of the perineum, and damaging internal organs. The women experienced being anxious because they did not know what to expect and tended to expect the worst to happen. They feared the unknown and worried about, when labor would start, if they would be able to handle labor without embarrassment, and if they would be successful at a vaginal delivery. They also perceived that a c-section was an easier childbirth, had less pain, gave more control over the birth, and enabled family to be present; they saw a c-section as being more predictable.

These mothers often chose to have elective c-sections believing that was the best decision for themselves. They saw themselves as not missing out on anything associated with a baby being born through the birth canal. Making the decision to have an elective c-section brought them happiness. They perceived that the delivery would be less traumatic than a vaginal birth and the baby's appearance would be better.

As the pregnancy progressed, they strived for a good outcome by attending prenatal appointments, having routine ultrasounds to watch their babies grow and have testing to assure their babies were healthy. Pregnant women gathered information on c-section births from a variety of sources, including health care providers, attending childbirth classes, reading books, watching television and surfing the Internet. They sought support from health care providers, friends and family; their decisions were

influenced by these physicians, family and friends. However, they occasionally encountered non-supportive family, and friends who believed that c-sections was riskier and that they would miss out on a vaginal birth. Some also received inappropriate medical information from their health care providers, family members and friends. They dealt with these hindrances by taking control over their decision to have a c-section. These women were highly attracted to the ability to schedule the babies' birth. This ability to choose the date was extremely important to these mothers.

Mothers stated that the consequences of their decision were happiness that they made the correct decision. In this study, all mothers and babies did well and had no complications, except for one who had an epidural anesthesia that did not work and had to have general anesthesia for the birth. Nonetheless, she was also happy with her c-section outcome. In the end mothers who had an elective c-section were proud of their babies' "pretty round heads" and would have another c-section in the future if pregnant again.

Summary

The theory, "Having an Elective C-section: Doing What's Best," emerged from the data of interviews with seven women who chose to have elective c-sections instead of experiencing labor and a vaginal birth. Use of the paradigm model provided structure for the core categories and the linkages between categories. The theory demonstrated the process that pregnant women experience to make the decision regarding their mode of delivery. The theory may be useful to healthcare providers to better educate women about their choices, support women in their choices and give them informed options regarding the mode of delivery.

V. DISCUSSION, CONCLUSIONS, & RECOMMENDATIONS

The purpose of this study was to understand the process by which healthy, low-risk women made the decision to have elective primary c-sections, despite the absence of medical indications. The substantive theory "Having an Elective C-section: Doing What's Best" was inductively constructed from the data. While most studies have focused on the risks of having elective c-sections, this study attempts to illuminate the process of how women make those decisions, often being unaware of the risks involved. This chapter is organized into four sections, (a) discussion of the findings, (b) placing the theory within the conditional matrix, (c) conclusions including the implications for nursing, and (d) recommendations.

Discussion

Seven women who underwent an elective primary c-section were interviewed and asked to tell their birth stories. The initial question was "how did you feel when you found out you were pregnant," and was used to establish rapport on a mother-to-mother level. Subsequent questions were more specific and attempted to reveal the story behind their decision to have a c-section. Although each story was unique, patterns emerged early in the process of interviewing.

A common theme that emerged through every interview was fear: fear of labor, of vaginal birth and of potential trauma to the infant. Fear is a complex, multifactorial emotion. Each woman described reasons for the fear very specifically. In this study, the subcategories explaining why "being scared" was important were being fearful, being anxious, and anticipating pain. Mothers interviewed were afraid of (a) embarrassing themselves, (b) damage to pelvic organs, (c) trauma to the baby, (d) use of forceps, (e)

screaming from labor contractions, and (f) expelling the baby through the birth canal. Findings from this study regarding fear of vaginal delivery are consistent with the literature. Fenwick, Staff, Gamble, Creedy, and Bayes (2008) studied 14 women who chose elective c-sections due to fear. "Women found it difficult to conceptualize how a baby could be expelled from their body without suffering extreme injury" (p. 3). Like the women in the Fenwick study, women in this study also believed that a vaginal delivery was potentially dangerous to the baby as well as the mother. Stories about the horrible experiences of friends and family also played a role in making the decision for an elective c-section, contributing to fear and anxiety. Pang, Leung, Lau, and Chung (2008) also found that fear of vaginal birth was the most important reason for choosing a c-section. Fear of vaginal birth was also demonstrated as a strong reason for choosing a c-section by Kringeland, Daltveit, and Møller (2009).

Another reason pregnant woman chose a c-section in this study was because it was perceived as an easier birth. These findings are consistent with those of Bryant et al. (2007) who reported that a c-section was seen as a more orderly and controlled birthing option. In a study of 3,680 university students without a history of childbirth, Stoll et al. (2009) reported that a majority of women and their male partners who desired a c-section said that it was better and healthier.

"Doing what's best," the core phenomenon identified in the study, was clearly related to the fears associated with vaginal birth. To alleviate those fears, the mothers in this study choose a c-section as best for them. Lee and Kirkman (2008) reported that vaginal childbirth is inherently risky and is to be feared. Therefore, a c-section is considered by women to be the best delivery option. The theme of "doing what's best"

also was reported in a study by Stoll et al. (2009). Fenwick and colleagues (2008) studied 14 women using qualitative methods and found that alleviation of fear was equated with safety, i.e. “doing what’s best.”

The context which was the background against which the process of “doing what’s best” and “progressing through the pregnancy” was seen as doing what is necessary to have the best outcome. This related to having good prenatal care, maternal activities to maintain good health and watching over the health of the fetus. Progressing through the pregnancy is directly tied to prenatal care. All the women in the study verbalized the importance of having good prenatal care and practicing healthy habits. Early and regular prenatal care is known to reduce complications of pregnancy, and reduce morbidity and mortality rates for both mother and baby (Entry into prenatal care, 2000).

“Seeking support” (action/interaction strategy under “exploring choices”) and “receiving support from others” (intervening factors, facilitating and hindering) are closely related and will be discussed together. Support was vital to the mother choosing a c-section. Support came from health care providers, who were mostly obstetricians, friends and family of the mother. This was consistent with other research studies. In a review of seven papers, Alio, Salihu, Kornosky, Richmand and Marty (2009) found that the father of the baby has a positive influence on the number of prenatal care visits, lifestyle changes to promote health of the mother and baby and a reduction in low birth weight infants. In this study, although male partners were very supportive of their pregnant partners, they did not participate in the decision-making process. Pregnant women made their decision, informed the male partner, and then sought his support. Most

men wanted to do what was best for their pregnant partner but acknowledged that the woman knew what was best. It is unknown if the male partners were fully aware of the risks/benefits of both delivery options.

Fox and Worts (1999) reported that strong social support alleviated fear and anxiety in women choosing a c-section for delivery. Friends and family often shared their own birthing stories in an effort to provide support to the mother. Often these stories were negative as women told about long, hard labors, perineal tears and the pain of episiotomies. Like the women in the Fenwick et al. (2008) study, stories about the horrible experiences of friends and family also played a role in making the decision for an elective c-section contributing to fear and anxiety. Fenwick et al. called this "vicarious trauma" (p. 5). These negative stories had a significant impact on the mothers in the study as they decided to have an elective c-section. Two participants explained that their mothers had positive experiences with a c-section.

Obstetricians also played a role in the support of mothers requesting a c-section. All the mothers cited positive support from their obstetrician in their desire to have the procedure. Although one obstetrician was reportedly surprised that patient asked for a c-section, he did offer his support once the mother shared her reasons for asking for a c-section. Among health care providers, the notion of maternal request c-section has been hotly debated in the literature as discussed in Chapter Two. Obstetricians have reasons to support women in their requests for an elective c-section. ACOG (2003) states that it is permissible to perform a maternal request c-section if it is in the best interest of the mother and baby. Wax, Cartin, Pinette, and Blackstone (2005) reported that 85% of obstetricians were willing to perform maternal request c-sections.

There are several reasons that obstetricians may agree to perform elective c-sections. Reasons such as convenience of scheduling (Brown, 1996; Lo, 2003), less time needed when compared to labor and vaginal delivery (Penna & Arulkumaran, 2003), and financial gain (Tsai & Hu, 2002) may induce an obstetrician to perform these c-sections. Some physicians make comments to the mother that indicate she might need a c-section anyway (Lothian & Grauer, 2003). Comments such as "you've got a big baby in there" and "you have a prominent tailbone" confirm the woman's decision to have an elective c-section. In summary, consistent with the study results, obstetricians were supportive when women decided on having maternal request c-sections.

Although there is much contact with nurses during pregnancy, the nurses were invisible in this study. Nurses did not appear to play any role in the decision-making process. Nurses were mentioned twice as "being nice." But there was no data on the influence of nurses as supportive healthcare providers or providers of information. This is a disturbing finding. Nurses should play a significant role in providing information and support for these women. This finding raises several questions: Are nurses talking to pregnant women about their pregnancy and concerns about delivery? Do nurses know the risks of maternal request c-sections? How are they getting consents signed without any discussion of risks? This will be addressed in Chapter Six.

Women gathered information to help assist them in making the right decision regarding their mode of delivery. Most women in the study sought information from their obstetricians, friends and families. One physician in a qualitative study by Bryant, Porter, Tracy and Sullivan (2007) believed that obtaining informed consent was the same as providing adequate information on birthing options. Information from friends and family

was mostly personal story telling of their experiences. One woman looked up information on c-sections on the Internet, which may or may not have provided accurate information. Several women revealed that they watched television reality shows, such as Deliver Me, Baby Story and Special Delivery and believed they provided accurate information. There is no information in the literature about the accuracy of information in these reality shows, as they are intended primarily only for entertainment purposes. Lothian and Grauer (2003) report that television reality programs show birth to be a medical process, instead of a normal process. They claim that some programs are frightening enough to cause a woman to ask for an elective c-section. One participant was given a pamphlet on c-sections, which she considered was too medical for her to understand. She was the only participant who received written information from her obstetrician. Written information can be very informative, if written so that it is understandable at the 5th grade level. Kolip and Büchter (2009) reported that the majority of women did not receive sufficient information about the consequences of a c-section.

All the participants in the study verbalized the importance of having a good outcome. Having a good outcome for mother meant that there were no painful contractions, no sore perineum, no missing out on experience of childbirth, and knowing what was going to happen. Overall participants expressed happiness with the childbirth experiences of an elective c-section. Having a good outcome for baby meant a less traumatic delivery, no bruising or scratches and a pretty round baby head. This is consistent with findings by Bylund (2005) who indicated that the autonomy of being able to make a decision for a c-section leads to higher patient satisfaction with the delivery. The consequences reinforced the reasons mothers had chosen a maternal request c-

section. Fears, and anxiety were alleviated. Mothers did not have to endure painful contractions. Trauma to the baby was prevented. Of all the possible complications of c-sections, none was reported in this group. If the study included a higher number of participants, some complications may have been identified considering the mortality and morbidity rates associated with elective c-sections.

Placing the Theory Within the Conditional Matrix

According to Strauss and Corbin (1990), a conditional matrix (see Figure Four) helps the researcher to be theoretically sensitive to the range of conditions that might affect the phenomenon of interest, to the range of potential consequences that may result from action/interaction and assists to relate conditions, actions/interactions and consequences of a phenomenon. See Figure 2 the conditional matrix (Strauss & Corbin, 1990) on page 59.

In this context, the conditional matrix is about decreasing the rate of maternal request c-sections. The inner ring is the action, having a maternal request c-section. The second ring is interaction with physicians, friends and family that support the mother's decision to have a maternal request c-section or intervene to promote vaginal delivery. The third ring represents the group of individuals, the health care providers providing maternity care to these mothers. The influence of health care providers is important in supporting women who make the decision about delivery. It is also important in considering ways to reduce the c-section rates, such as providing accurate information early on, and changing childbirth classes to include realistic information about both types of deliveries. The sub-organization level includes the obstetrical unit and its philosophy about childbirth and the role of maternal request c-sections. The organization level

includes the hospital that has many interests, including (a) patient satisfaction, (b) insurance reimbursement, (c) potential malpractice claims, (d) costs related to increased length of stay, (e) occupancy rates and (f) wise use of resources. Community relates to area wide concerns, such as increased costs to Medicaid and the costs of complications when they occur, such as increased medical costs, and loss of wages of the parent. At the national level, the setting of standards of care is important. Sweeping changes in nursing and medical obstetrical care need to be made, including providing more accurate information, making exploring fears a routine part of prenatal care, providing counseling to women who fear vaginal birth and changing viewpoints about childbirth from a medical process to a natural process. The international level concerns itself with these changes also and making them culturally specific. Maternal request c-sections without clear medical rationale are an international problem, especially in China, South America and Scandinavia. Open dialogue with all countries is the key to solving the problem of increasing maternal request c-sections. Many countries look to the United States to adopt standards of care. Actions on the national level, passed up to other countries and down to the community level, organizational, sub-organizational, and finally down to the individual women may promote vaginal birth and reduce the c-section rate due to maternal request c-sections.

Implications for Nursing

Pregnant women have more contact with nurses than with any other health care provider. Pregnant women encounter nurses as primary care providers, in the medical provider's office, baby fairs, childbirth classes, and during hospitalizations for tests and childbirth. At all points of contact nurses have the opportunity to assist women with

gathering information and making decisions about options for childbirth. Nurses appeared to be invisible in this study. Nurses in all obstetrical settings should be talking with women regarding their pregnancy and upcoming birth. Nurses are in a unique position to offer support to women regarding their decision and act as patient advocates. Nurses need to be aware of the research on maternal request c-sections to assist women in their decision-making process. Nurses, due to the unique nurse-patient relationship and their knowledge of these issues, may carry out many of the recommendations listed below.

Implications for Nursing Practice

There are several implications and recommendations that nurses can implement. The first recommendation is to teach obstetrical nurses to embrace birth as a normal process and make them aware that c-sections are a risky procedure and should only be done for medical indications. This education should begin with undergraduates and associate degree nurses and be extended throughout the education process at higher levels of education. Two women in my study were obstetrical nurses who experienced maternal request c-sections and recommended them to others. Regan and Liaschenko (2007) reported that nurses who saw birth as a natural process used empirical, intuitive, and empathetic knowledge in interacting with patients. Using cognitive frames, they tended to see women as low-risk, and desiring a vaginal childbirth. Nurses believed in the body's ability to give birth vaginally. The pregnant woman was seen as the expert knower for both herself and her baby. Nurses who saw birth as a lurking risk or risky process revealed that "nature is flawed and risk is inevitable in the childbearing process" (Regan & Liaschenko, p. 621). Regan and Liaschenko stated that nurses who see birth as a

natural process can reduce the maternal request c-section rate. This belief needs to be fostered in nursing education as well as in obstetrical nursing.

Women in this study made the decision to have a maternal request c-section at about 28 weeks. This differs from the work of Hildingsson (2008). Hildingsson recommended that women be questioned about their intended mode of delivery early in pregnancy. Hildingsson studied 2,878 women in early pregnancy and postpartum. Only 30% of those who selected a maternal request c-section in early pregnancy actually had a c-section. Asking women about their preference in early pregnancy, enables health care providers to provide accurate information and support throughout the pregnancy.

In this study, fears of labor and vaginal delivery caused all of the participants to ask for an elective c-section. Hildingsson (2008) reported that 48% of the women who had a preference and subsequently had an elective c-section did so for psycho-social reasons, that is, presumed fears. Fears of pregnant women regarding labor and delivery were well documented in Chapter II, Review of Literature. Discussion about the mode of delivery early in pregnancy can allow fears to be identified. A standardized test that is simple, and easy to administer needs to be developed to use at the first or second prenatal visit and perhaps closer to term. This would identify women who have fears and anxiety and allow time for counseling. Identification of fears and appropriate counseling can convince some women to proceed with a vaginal delivery. Nerum, Halvorsean, Sørlie and Ølan (2005) reported 86% of women with intense fear and anxiety changed their request for a c-section and decided on a vaginal birth after crisis-oriented counseling. In summary, fear is the leading cause in women asking for an elective c-section in this study. Identification and counseling can reduce the c-section rate for these women.

Informational material should be developed and tested by nurses to show increased knowledge by the pregnant women. Accurate and complete information should be available for women about their birthing options. Information should be made available to childbirth classes, CNM and obstetrician's offices, baby fairs, public health departments and any place pregnant women congregate. This information should include the risks of maternal request c-sections to both mother and baby. It should be readable and understandable at an 5th grade level and should be available in English and Spanish. Discussions between health care providers and women should include the risks of a c-section. Risks of c-sections should not be glossed over but rather an accurate and complete discourse should occur. Decisional aids, such as decision trees, should also be available to personalize a woman's decision. Frost, Shaw, Montgomery, and Murphy (2009) determined that pregnant women who used a decisional aid had greater knowledge and reduced anxiety than those in the control group. The decisional aid "helped women to appreciate and cope with the uncertainties of labour and delivery" (p. 902). In summary, accurate and complete information is essential to women deciding a mode of delivery. A study of the effectiveness of appropriate information should be done. Follow-up studies of women who delivered by maternal request c-section should be performed to determine if they were satisfied with their birthing experience.

Nursing Education Implications

Nursing students should be exposed to all types of birthing options. The concept of the maternal request c-section should be taught to all nursing students, including undergraduates and graduate students in obstetrical nursing. The focus should be on birth as a normal process and not a medical problem that needs to be treated. Placing

students in clinical areas where birth is considered normal is vital to their obstetric education. Students should be placed in sites that utilize midwives, and free-standing birthing centers. Overall, the focus that birth is a natural process should be taught from the beginning of nursing education, through practice, and through higher education, such as Master's preparation or the Doctor of Nursing Practice. An increase in nurse midwifery programs would also help propagate this attitude.

Nursing Research Implications

This area of maternal request c-sections needs further research. Qualitative studies with an increased sample size would be invaluable for further study in this area. Samples for further research should be more diverse, the basis of race, ethnicity, and different socioeconomic groups. Studies should be evaluated and evidence based guidelines should be developed and tested. Studies should include an in depth discourse about the mother's knowledge of risks of maternal request c-sections and where that knowledge came from. Nurses should publish studies on the attitudes of nurses on childbirth and the implications of those attitudes.

Policy Implications

The key to policy implications is to place birth as a normal process in healthy low-risk women. not a medicalized process that requires medical treatment. An important policy implication is to reduce costs of the maternal request c-section by reducing the number. The Medicaid program should pay the same reimbursement for a vaginal delivery and an elective c-section. Private insurance should follow Medicaid's lead and do the same. Consideration should be given to have mothers pay the difference between vaginal delivery and elective c-sections. Lobbying efforts by groups such as

AWHONN (Association of Woman's Health, Obstetrical and Neonatal Nurses) and the March of Dimes are occurring in attempts to reduce the c-section rate by reducing maternal request c-sections. Nurses can advocate for women who want a normal birth process by writing, and educating women and policy makers about the risks/benefits of different birth options.

Nurses and/or feminists should educate policy makers and the general public that birth is a natural process and is a more desirable birth option than elective c-section. A shift away from the medicalization of childbirth can be accomplished by educating women about their birth options, risks and rewards. A major media campaign should be undertaken by nurses and physicians who are against maternal request c-section to reduce the medicalization of childbirth.

Recommendations

The following recommendations are provided as identified by the study results:

1. Teach nurses to embrace birth as a normal process and make them aware that c-sections are a risky procedure. Begin teaching in undergraduate programs and extend to doctoral programs. Teaching that birth is a normal process should also be reinforced periodically on the obstetric unit.
2. Question pregnant women about their desires for birth early in the pregnancy so fears can be identified and counseling may occur by social workers, psychologists, and psychiatrist familiar with pregnancy and childbirth fears.
3. Provide complete, accurate information on the risks of c-sections and the benefits of vaginal delivery in all prenatal settings developed by nurses. Make information

understandable at a 5th grade reading level. Design information for use in collaboration between nurses and patients.

4. Institute a method of testing for every woman during regular prenatal care for fears of childbirth early in pregnancy and the third trimester.

Additional Recommendations from the Literature

Increased use of midwifery services may reduce maternal request c-section rates since midwives generally view childbirth as a natural process and not as a medical problem. In an effort to reduce c-section rates in Brazil, the government enacted several policy reforms for the recognition and reimbursement of nurse-midwives services and funded more nursing schools to provide nurse-midwives (Carr & Riesco, 2007). Roberts and Vitonia (2008) studied midwifery care in Massachusetts. They reported hospitals with the highest rate of certified nurse midwife (CNM)-attended births had lower overall c-section rates. Rosenblatt et al. (1997) also reported that patients of CNM patients received fewer c-sections. Better utilization of midwifery services would decrease the number of c-sections.

If the pregnant woman decides on a maternal request c-section, interventions can be performed by the nursing staff to foster bonding and breast feeding. Nurses can allow the baby to stay with the mother from birth into the recovery room and allow skin-to-skin contact during this time. Smith, Plaat and Fisk (2008) recommend a technique where the baby's head is delivered, then the body is slowly delivered to allow the uterus to clamp down and help expel fetal lung fluid. This may reduce the incidence of respiratory distress after birth. After expulsion of the body in a gentle fashion and wellbeing is established, the baby is immediately laid on the mother's chest and gently dried with

warm towels. In a Cochrane Review, Moore, Anderson and Bergman (2007) reported skin-to-skin contact improved breastfeeding rates, increased duration of breast feeding, improved women's satisfaction, increased maternal attachment behaviors, resulting in babies crying less and no adverse effects were observed. Velandia, Matthisen, Uvnäs-Moberg, and Nissen (2010) reported that mothers and babies interacted more vocally during skin-to-skin contact.

Summary

The purpose of this study was to develop a theory of the process women use to make the decision to deliver their babies by cesarean section, instead of having a trial of labor and expected vaginal birth. A theory emerged titled "Having an Elective C-section: Doing What's Best." The paradigm model showed the theory graphically and included antecedents, the phenomenon, action/interaction strategies, intervening conditions, and consequences. A conditional matrix was discussed showing the effects of maternal request c-sections from the individual women to an international level. Findings were discussed and recommendations were made. The ultimate goal of this study was to understand the hows and whys used by women to make this important birthing decision, to be able to reduce the number of maternal request c-sections, thereby reducing the c-section rate and reducing associated morbidity and mortality.

VI. RETROSPECTIVE INSIGHTS

This Chapter addresses issues related to maternal request c-sections. It includes issues surrounding obtaining informed consent by nurses and patient literacy.

What is the role of the nurse in obtaining informed consent? In my experience, the nurse has the patient sign the consent form after the physician has discussed the risks/benefits with the patient. There is little discussion between the nurse and patient about the risks/benefits. Traditionally, the physician is responsible for explaining the risks/benefits of a procedure. It is the nurse's responsibility to assure the physician has discussed the procedure with the patient and that the patient understands the risks/benefits. If this is done, the nurse has a responsibility to discuss these risks/benefits with the patient to assure patient understanding. The physician may not have the time to discuss all the risks/benefits with the patient. Therefore, it is essential that the nurse understand the risks/benefits and discuss those with the patient. Nurses who are getting this consent signed should have some formal education on the risks/benefits of maternal request c-sections. This could easily be done in the continuing education setting or as a unit inservice on an annual basis. Nurses also need to know the procedure to follow, if the patient does not understand the risks/benefits. The procedure and the ethical issues of obtaining informed consent should be taught in schools of nursing.

Another issue related to informed consent is the literacy status of the patient. This should be assessed by the nursing staff. The Flesch-Kincaid literacy scale can be used to evaluate the patient's level of understanding. The scale, found in Microsoft WORD, measures the reading level according to grade levels. Pregnant women with low literacy may require different methods of teaching and providing information. Nieves-Khouw,

Welton, and Muchow (2009) list methods of teaching for patients with low literacy, including providing a coach or advocate, providing information in small units, using visual aids, audiotapes and video tapes, and one-on-one assessments. Patients with higher literacy may seek information in reader-friendly printed material, books and on-line materials. Nurses should ask what was discovered on the Internet, as some of the information may not be complete or accurate. Other ways to assure understanding is to ask the patient to repeat back the information they have heard.

Consent forms should be readable by the patient. Lorenzen, Melby, and Earles (2008) list ways to improve consent forms include using simple words, making the consent one page, using short sentences, minimal medical terms, 12 to 14 point serif fonts, generous white space, numbering and bullet points, clear headings, and 1.5 line spacing. In the study by Lorenzen and colleagues, 91% read the revised consent form based on the recommended changes compared to 25% who read the traditional consent form. Ninety-four percent of nurses were more satisfied with the revised consent form. Patients expressed thanks for the more readable consent form.

In summary, nurses must be knowledgable about the risks/benefits of the maternal request c-section so informed consent can be obtained. Nurses must consider the literacy of the patient when providing information on the procedures. Consent forms should be simplified to be readable by patients.

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APPENDICES

Appendix A. Summary of critique of studies.
(Cesarean section abbreviated by CS; Cesarean section by maternal request abbreviated CDMR)

Study/Theory	**Design/Sample**	**Outcomes**	**Strengths/Limitations**
Brown (1996) Mentions several theories but unclear if they guided the study	Quantitative design, # of deliveries (n=9,726)	MD leisure time	Used data from military hospitals where economic incentives or malpractices issues were related to affect # of CS
Bryant et al. (2007) No theory listed	Qualitative design, women's (n=18) about c-sections (CS), obstetricians (n=6, midwives (n=12)	Women's perceptions of CDMR	No methods discussed, used excellent exemplars to illustrate points
Cakmak & Kuguolgu (2007) No theory	Observational and comparison study in Istanbul, (n=200)	Neonatal outcome regarding breastfeeding	Not a representative sample
Cheung, Mander, Cheng, Chen & Yang (2006) Developed a framework for decision-making	Qualitative	Taiwanese women's perceptions of CDMR	No sample size
Declercq, Barger et al. (2007) No theory listed	Quantitative Massachusetts data system, n=244,088	Rehospitalization rates after planned CS, costs, increased length of stay	Adequate sample size. Sound statistical methods
Declercq, Sakala, Corry, Applebaum & Risher (2002) No theory listed	Survey conducted by Harris Interactive Survey conducted by Harris Interactive, mothers (n=136) interviewed by phone, 1,447 completed on line	Technology associated with childbirth	Sample not representative, required internet or telephone to participate, sample included well education, Caucasian women, middle to upper class
Deneux-Tharaux, Carmona, Bouvier-Colle, & Bréart (2006)	Quantitative, population based case study controlled, n=10,244	CS is associated with maternal deaths	Small sample size in death group

No theory listed			
Dewey, Nommsen-Rivers, Heinig & Cohen (2003) No theory listed	Quantitative, sample had to breastfeed for at least 1 month	Infants born by CS had more difficulty breast feeding	Procedures difficult to understand
Druzin, El-Sayed (2006) No theory listed	Quantitative	Cost of CS	Did not delineate CDMR, no section on methods or design, used data from one hospital in California
Fogelson, Menard, Hulsey & Ebling (2005) No theory used	Retrospective cohort study of 3,251 infants	Neonatal outcomes	Sample of 117 CDMR and 3,134 vaginal deliveries
Getahun, Oyelese, Salihu & Ananth (2007) No theory listed	Longitudinal study in Missouri using linked data examining relative risks, CS group n=156,475 & 31,102 in subsequent CS group	50% increase of placenta previa in subsequent pregnancies after CS	Did not distinguish between CDMR and CS, data from 1989-1997
Ghetti, Chan & Guise (2004) No theory listed	Survey research with 175 physicians	Most MD would not perform a CDMR	Too small a sample size to make generalizations
Guise et al. (2004) No theory listed	Systematic review of 568 articles	Having a CS subsequently increased the risk of uterine rupture	Bias in some studies, difficult to compare studies
Hofberg &Brockington (2000) No theory listed	Qualitative, purposeful sample interviews with 26 women who had extreme fear of childbirth	8 women had dread of childbirth from adolescences, 14 after previous traumatic delivery, about ½ choose a CDMR	Sample not representative of general population
Kiehl & White (2003) Roy's model of adaptation	Quantitative study of 147 women	Mothers who reported greater adaptation during pregnancy were better adapted postpartum	Study done in Norway, Sweden and US. Used different questionnaires for each country, convenience sample
Kolas et al. (2003) No theory listed	Prospective study of 24 birthing units, n+24,157	Incidence of CDMR 7.6%	Adequate sample size. Sound statistical methods
Kolas, Saugstad,	Prospective study of	Infants born	Did not address other

Daltveit, Nilsen & Øian (2006) No theory listed	18,653 deliveries in 24 maternity units	CDMR at twice the risk for admission to NICU & pulmonary problems	problems causing wheezing
Liem, Huq, Ekuma, Becker, & Kozyrsky (2007) No theory listed	Quantitative study 12,763 children	Infants with TTN are associated with wheezing in childhood	Adequate sample size. Sound statistical methods
Lo (2006) No theory listed	Quantitative Birth certificate data on 143,781 births and 71,875 clinics	Reason for CDMR includes MD convenience and birth on 12/31 for tax purposes	Adequate sample size. Sound statistical methods
Lui et al. (2007) No theory listed	Quantitative, used Canadian Institute for Health Information discharge data base CS group n=46,776; planned vaginal group n=2,292,420	Maternal morbidity rates & complications	Data collected from 1991-2005
Lydon-Rochelle, Holt, Martin & Easterling (2006) No theory listed	Quantitative, Population based validation N= 4,541	Indications for CS 18% desired CDMR	Experienced coders, questioned the accuracy of some medical records
MacDorman. Declercq, Menacker, & Malloy (2006) No theory listed	Quantitative analysis using nationally linked birth/death data with 5,762,037 births and 11,897 deaths	Neonatal mortality rates higher I the indicated risk CS group	Used a specific method to eliminate women according to risk factors, accounted for infants with malformations
Martin et al. (2005) No theory listed	CDC statistical report	CS rate rose to 30.2% with a 41% increase from 1996-2005	Adequate sample size. Sound statistical methods
McCourt et al. (2007) No theory listed	Review of 17 studies, data from 33 states, data obtained for 85% of hospital discharges (over 7 million births)	Maternal fears of receiving substandard care, pain, perineal tears	Excluded studies of women who had repeat CS, data from several countries
Meikle, Steiner, Zhang & Lawrence (2005) No theory listed	HCUP statistics, data from 33 states in 2001, from 7 million discharges	CDMR increased from 19.7% in 1994 to 28.3% in 2001	Used algorithm using ICD-9 codes, excluding women with repeat CS. Use goodness of fit indices

Merrill & Steiner (2006) No theory used	Statistical report, data came from HCUP and AHRQ	4 million childbirths in US, delivery of infant the most common cause for hospitalization	Adequate sample size. Sound statistical methods
Mozingo, Davis, Thomas, & Droppleman (2002)	Descriptive phenomenology, 10 women interviewed	Women's experience of childbirth related anger	Adequate sample size. Sound statistical methods
Nerum, Halvorsean, Sorlie & Ølian (2006) Theory of crises (Caplan)	Quantitative analysis of 86 women referred to intervention for fear of childbirth	Choosing CDMR for fear, intervention reduced fears & fewer women chose CDMR	Had a good theoretical framework, procedures well delineated
Park, Yeoum & Choi (2005) No theory	Q methodology on 71 statements from 7 persons	Identified what type of personality would choose a particular type of delivery	Methods for Q sorting clearly identified
Rowe-Murray & Fisher (2002) No theory	Prospective, longitudinal study with a sociodemographically representative samp0le of 203 primp women in 4 hospitals in Australia	CS and neonatal outcomes of breast feeding	Women who completed survey were significantly older, had higher levels of education, a higher status of occupation & were more likely to have private insurance
Rowe-Murray & Fisher (2001) No theory listed	Same as above	Outcomes for maternal-infant bonding and post-partum depression	Limited generalizability
Saisto (2001) Unknown if used theory	Quantitive method, dissertation	Personal characteristics, previous OB experiences, pain sensitivity, fear, intervention	Adequate sample size. Sound statistical methods
Saisto, Salemela-Aro, Nurmi, Kononen & Halmesmaki (2001) No theory listed	Blinded, experimental design for intervention for childbirth-related fear, 176 women in Finland	8% of CDMR done because of fears of study subjects	Study subjects not representative of the general populations

Salem et al. (2006) No theory listed	Quantitative, studied 3,464 children	Incidence of hay fever, asthma, & allergy	Did not collect data on possible confounding variables
Tsai & Hu (2002) No theory listed	Quantitative, 11,788 women studied	Women who are insured are more likely to obtain a CS	Adequate sample size. Sound statistical methods
Vaknin et al. (2008) No theory listed	Quantitative, retrospective chart review of 6 women who had uterine rupture, study of 120,636 women	CS associated with subsequent uterine rupture, rupture difficult to diagnose	Largest case series in the literature, from a single medical center
Walker, Turnbill & Wilkinson (2004) No theory	Quantitative, survey of 92 Australian women	53% of women believed CDMR was a convenient way to give birth	62% return rate on surveys
Wang, Dorer, Fleming & Cartin (2004) No theory listed	Quantitative study on 7,474 newborn infants	Differences between term and near-term infant	Did not address long-term outcomes
Wax, Cartin, Pinette, & Blackstone (2005) No theory listed	Quantitative, survey of 110 obstetricians	Women's perceptions of CS birth, fears, convenience	Survey not pilot-tested prior to study
Weaver & Stratham (2005)	Qualitative study of 44 women postnatally	Women perceive CDMR is safer for infant	Used member-checking, used exemplars to illustrate salient points
Wu, Kocherginsky & Hibbard (2005) No theory listed	Matched, case-control study on 64,359 deliveries	Risk factors for placenta accreta are advancing maternal age & 2 or more CS	Problems with definitions, compensated by using both clinical & histologic criteria, Retrospective study

Appendix B. Flyer.

Attention Birth Mothers:
Did you have a c-section by choice?

If so, I would like to talk to you about you experience with your delivery for a study. You are eligible to be in the study if you had a c-section by your choice within the past 2 years, had a healthy pregnancy, are over the age of 18 years, are English speaking, and not pregnant at this time.

How will the study benefit me?

You will receive a $20 gift card. You will have the satisfaction of helping other mothers, babies, and health care providers in the future.

How can I help?

You will be interviewed by me, Cindy Michaluk, the nurse researcher. The interview will take about one to 1½ hours, in a place of your choosing. The interview will be recorded and then transcribed. Each will be stored separately and locked up. The interview will be confidential and anonymous. No one will know who you are except me. No one will know who you are except me and my faculty advisor.

Why are you doing this study?

I am a registered nurse and a nurse practitioner. I want to learn more about how women decide to have a c-section by choice. This study is my dissertation work and by earning a PhD in nursing at the University of Tennessee in Knoxville will allow me to continue to learn to help mothers and babies.

What do I do if I want to participate?

Call me, Cindy Michaluk, at (865) 206-5788 and we will arrange a time and place for the interview. You will be able to ask any questions at that time. If you have additional questions, you may contact my advisor, Dr. Joanne Hall at 548-4318.

Appendix C. Demographic Questionnaire

A Survey for Women Who Have Had a Cesarean Section at the Mother's Request

Please answer each question as it applied at the time you had your c-section.

1. What is this baby's birthday: _____

2. What was your age at the time of the baby's birth? _____

3. What is the highest school degree obtained: (circle one)

    a. Less than high school
    b. High school/GED
    c. Some college
    d. 2-year college degree (Associates)
    e. 4-year college degree (BA, BS)
    f. Master's degree
    g. Doctoral degree
    h. Professional degree (MD, JD)

4. What is your total household income? (circle one)

    a. I prefer not to answer this question
    b. Less than $10,000
    c. 10,000-19,999
    d. 20,000-29,999
    e. 30,000-39,999
    f. 40,000-49,999
    g. 50,000-59,999
    h. 60,000-69,999
    i. 70,000-79,999
    j. 80,000-89,999
    k. 90,000-99,999
    l. 100,000-150,000
    m. Greater than 150,000

5. What type of insurance did you have when the baby was born? (circle one)

    a. None
    b. Medicaid or TennCare
    c. Private insurance

6. What was your marital status when your baby was born? (circle one)

    a. Single, never married
    b. Married
    c. Separated
    d. Divorced
    e. Widowed
    f. Unmarried living with a partner

7. What is your race? (circle one)

    a. White
    b. African-American
    c. Hispanic
    d. Asian-Pacific Islander
    e. Native American
    f. Other, specify _____

8. How many times have you been pregnant?_____

9. How many live births did you have?_____

Appendix D. Confidentiality Agreement.

CONFIDENTIALITY AGREEMENT

As a participating member of the interdisciplinary-grounded theory research colloquy at the University of Tennessee, which meets in the College of Nursing under the direction of Dr. Jan Brown, I agree to guarantee confidentiality to all participants whose transcripts are read aloud in the group meeting. This means that I will not repeat any words, phrases, or other excerpts from the recorded interviews outside of the meeting room. I will not publicly divulge the nature of any information learned, or discussions that have taken place, during the group meeting.

Signatures: Date:

Appendix E. Informed Consent.

INFORMED CONSENT STATEMENT

Researcher's Name: Cynthia Michaluk
How Women Decide to Deliver their Babies by Cesarean Delivery
University of Tennessee at Knoxville

INTRODUCTION

You are invited to participate in a research study about how healthy, low-risk women choose to deliver their babies by cesarean section. This is the purpose of the study.

INFORMATION ABOUT PARTICIPANTS' INVOLVEMENT IN THE STUDY

If you are interested in participating in the study, the researcher will interview you about your unique birthing experience. I will also ask about your pregnancy, the decision to deliver by c-section and the delivery. The interview will be set up at a place of your choosing and a time that is convenient for both. The interview will last about 1½ hours. The researcher will ask some questions, but you are encouraged to talk about the pregnancy and delivery. The researcher may take some notes during the interview. The interview will be recorded on a recorder. The interview recording will be typed. At the end of the interview the researcher will offer you the chance to phone, email or schedule another interview, if you desire. After the interview is complete, the researcher will analyze the data. After the data is analyzed, the researcher will write a report on the results. The report will be turned in to the Graduate School at the University of Tennessee in Knoxville.

RISKS

The risks to you are minimal. The primary risk to you is the possibility that during the interview process you may experience some memories that are painful. If this occurs, the researcher will stop the interview and give you the option of dropping out of the study. If I detect symptoms of an undiagnosed post-partum depression, the interview will be stopped and the recording destroyed. The researcher will offer you support and, if necessary make a referral to your doctor or a mental health care professional of your choice. If necessary, I will Mobile Crisis (539-2409) will be contacted. Symptoms of post-partum depression include being tearful and despondent, having feelings of inadequacy, guilt, and irritability, fatigue, difficulty concentrating and sleeping, and a lack of interest in activities, appearance and sex. Cognition will be assessed by evaluating the women's ability to answer questions during the screening telephone call and completing the demographic questionnaire.

BENEFITS

The benefit to participating in this study is that you will be helping health care professionals about providing care for mothers and babies. You will also have the opportunity to talk about your unique birthing experience. You will receive a 20$ gift card after your interview.

Your initials:_____

CONFIDENTIALITY

All study records will be kept confidential. Your real name will not appear on any data or publication. You may select a pseudonym to be used in the transcripts and all other materials. Data (typed interview or other records) will be stored securely in a designated filing cabinet in the researcher's home and will be made available only to the researcher, my faculty advisor, the nursing professors, the Compliance Office from the Office of Research, at the University of Tennessee at the College of Nursing. No reference will be made in oral or written reports that could link you to the study. Your name and other details may be changed to protect your identity. The recordings will be destroyed after the study been completed.

COMPENSATION

After the interviews, you will be given a 20$ gift card to a general merchandise store.

EMERGENCY MEDICAL TREATMENT

The University of Tennessee at Knoxville does not "automatically" reimburse you for medical claims. If physical injury is suffered in the course of research, please notify the researcher in charge Cynthia Michaluk at (865) 453-8070 or Dr. Joanne Hall at (865) 974-4151.

CONTACT INFORMATION

If there are any questions at any time about the study or the procedures, or if you experience adverse effects as a result of participating in this study, you may contact the researcher, Cynthia Michaluk at (865) 206-5788 or Dr. Joanne Hall at (865) 458-4318. If you have questions about your rights as a participant, contact the Office of Research Compliance Officer at (865) 974-3466

PARTICIPATION

Participation in this study is voluntary. You may decline to participate without penalty. If you decide to participate, you may withdraw from the study at anytime. The data may still be analyzed.

CONSENT

I have read the above information and I have received a copy of this form. I agree to participate in this study.

Participant's signature: _____ Date_____

Investigator's signature: _____ Date_____

Appendix F. Institutional Review Board Approval

THE UNIVERSITY of TENNESSEE KNOXVILLE

Institutional Review Board
Office of Research
1534 White Avenue
Knoxville, TN 37996-1529
Phone: 865.974.3466
Fax: 865.974.7400

August 12, 2010

IRB#: 8300 B

TITLE: How healthy, low-risk women make the decision to deliver their babies by cesarean section

Michaluk, Cynthia
Nursing
1132 Village Drive
Sevierville, TN 37862

Hall, Joanne
Nursing
1200 Volunteer Blvd.
Campus - 4180

Your project listed above has been reviewed and granted IRB approval under expedited review.

This approval is for a period ending one year from the date of this letter. Please make timely submission of renewal or prompt notification of project termination (see item #3 below).

Responsibilities of the investigator during the conduct of this project include the following:

1. To obtain prior approval from the Committee before instituting any changes in the project.
2. If signed consent forms are being obtained from subjects, they must be stored for at least three years following completion of the project
3. To submit a Form D to report changes in the project or to report termination at 12-month or less intervals.

The Committee wishes you every success in your research endeavor. This office will send you a renewal notice (Form R) on the anniversary of your approval date.

Sincerely,

Brenda Lawson

Brenda Lawson
Compliances

Enclosure

Appendix G. VITA

I graduated with a BSN from University of Tennessee at Chattanooga in 1978. I completed a certificate hospital-based program, trained as a neonatal nurse practitioner in 1980. I earned my MSN at the University of Tennessee at Knoxville in 1989. I worked as a neonatal nurse practitioner in NICUs at T.C. Thompson's Childrens Hospital in Chattanooga, Orlando Regional Medical Center and the University of Tennessee Medical Center in Knoxville. I was the Transport Coordinator at UT Medical Center for seven years, overseeing the air and ground transport of sick neonates. I began my PhD program at UT-Knoxville in 2007. I have two publications:

Gaylord, M.S., & Michaluk, C.A. (1996). General neonatal physiologic considerations. In Jaimovich, D.G., & Vidyasagar, D. (Eds.) *Handbook of Pediatric and Neonatal Transport Medicine.* Philadelphia, PA: Hanley & Belfus, Inc.

Michaluk, C.A. (2008). Cesarean delivery by maternal request: What neonatal nurses need to know. *Neonatal Network, 28*(3), 148.

I live in East Tennessee with my husband and two grown children. I have two dogs that are part chihuahuas, Pinky and Charlie.